A Forrester Total Economic Impact™
Study Commissioned By Zerto
February 2019

The Total Economic Impact™ Of Zerto

Cost Savings And Business Benefits Enabled By An IT Resilience Platform

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Benefits And Costs

Reduced cost of all downtime:
$4.6 million

Avoided cost of previous software tools:
$775,952

Reduced cost of disaster recovery and backup operations:
$661,925

Executive Summary

Zerto simplifies traditional disaster recovery (DR) for virtual environments and replaces the need for additional tools, including some backup products and specialty solutions, such as data migration and orchestration tools. Cloud-based deployment and functionality by Zerto improves migration to public cloud and significantly expedites data movement for many purposes (DR, backup, migrations, and others).

Zerto provides an IT Resilience Platform that protects against planned and unplanned disruptions, eliminating downtime and data loss. The platform enables application and data-workload mobility for hypervisor, storage, hardware, or cloud. Using Zerto, companies can accelerate the adoption and implementation of a multi-cloud, hybrid cloud strategy enabling workloads to, from, and between clouds without impacting production environments. The Zerto IT Resilience Platform is available as a product or as a subscription to Disaster-Recovery-as-a-Service (DRaaS).

To measure the financial impact realized by customers, Zerto commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential ROI enterprises may realize by deploying the Zerto IT Resilience Platform. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact on their organizations. To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four customers that implemented and leveraged Zerto for DR, backup, and cloud mobility and subsequently built a financial model around a hypothetical customer that begins with 1,000 virtual machines (VMs) and experiences the same benefits as those indicated by the interviewed companies.

Prior to using Zerto, customers faced the challenge of using various disparate DR tools for on-premises infrastructure, DR for VMs, backup tools, etc. As the organizations became increasingly virtualized, the need for comprehensive DR solutions for VM sparked an interest in Zerto. Several customers described how Zerto enabled them to move away from their fully redundant hardware configurations to modern DR, ultimately shifting the function completely to a service.

After implementing Zerto, the customers experienced a significant reduction in planned and unplanned downtime, reduced resource requirements for both DR and backup, and avoided costs related to major data center migrations. One engineering director told Forrester: “Zerto is completely autonomous. The VM can be a database; it can be a web server; it can be an enterprise application; it doesn’t matter. Zerto just picks up the bits and moves them.” On average, Zerto reduced recovery times by 75% and reduced operating costs by $6 million.

Key Findings

Quantified benefits. The following risk-adjusted present value (PV) benefits are representative of those experienced by the companies interviewed:

- **Reduced cost of unplanned outages for a typical customer valued at $2.5 million.** The organizations reduced the frequency and duration of unplanned outages by an average of one outage per 10 VMs per year. Since unplanned downtime interferes with business operations, including the customer experience, the cost of business downtime averaged $10,000 per hour. For a company with 1,000 VMs, the cost of unplanned downtime quickly reaches into millions of dollars.

ROI
279%

Benefits PV
$6 million

NPV
$4.4 million

Payback
<3 months

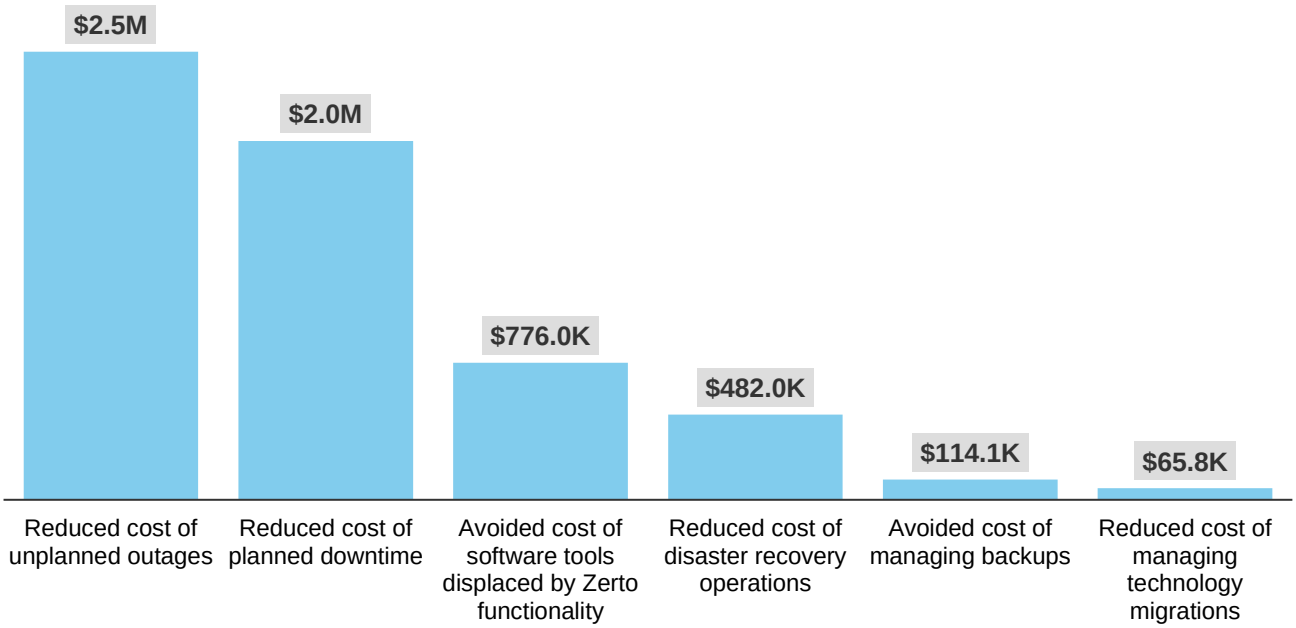
- **Reduced cost of planned downtime for a typical customer of $2 million.** Similarly, the cost was reduced for planned downtime for upgrades, new releases, and other changes, some of which were required for regulatory compliance. The executives told Forrester about decreasing windows of time in today's *always-on* climate. On average, using Zerto eliminated the need for one planned outage each month for an annual savings of $960,000.
- **Avoided cost of software tools displaced by Zerto of $775,952.** The organizations avoided paying for DR, backup, and migration software that they previously purchased, or would have needed to purchase without the investment in Zerto.
- **Reduced cost of disaster recovery operations valued at $481,952.** The companies ran quarterly testing of DR tools and processes. The improved performance of using Zerto increased employee productivity and freed up their time, so that they could focus on higher value tasks.
- **Avoided cost of managing backups of $114,147.** Similarly, employees avoided spending hours every morning to confirm backups, correct jobs that failed to complete, and make other changes to manage backups, resulting in continued productivity savings.
- **Reduced cost of managing technology migrations of $65,826.** The organizations faced periodic migrations that were simplified. Instead of moving massive amounts of data or even physical storage. Zerto's cloud-based platform moved the data with just a few keystrokes. The efficiency was no data loss and near-zero recovery point objective (RPO enabled by change-block tracking.

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

- **License cost of Zerto for three years totaling $1.6 million.** Forrester modeled a typical organization that began with 1,000 VMs that was growing by 20% per year. To support this environment, it paid fees to Zerto over three years.
- **Cost to implement and configure Zerto of $22,313.** The modeled organization dedicated two employees who spent 50% of their time for three months to implement and configure Zerto.

Forrester's interviews with four existing customers found that an organization based on these organizations experienced PV benefits of nearly $6 million over three years versus PV costs of $1.6 million, adding up to a net present value (NPV) of $4.4 million and an ROI of 279%.

Benefits (Three-Year)



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TEI Framework And Methodology

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ (TEI) framework for those organizations considering using Zerto.

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

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

DUE DILIGENCE
Interviewed Zerto stakeholders and Forrester analysts to gather data relative to Zerto IT Resilience Platform.

CUSTOMER INTERVIEWS
Interviewed four organizations using Zerto to obtain data with respect to costs, benefits, and risks.

COMPOSITE ORGANIZATION
Designed a composite organization based on characteristics of the interviewed 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 interviewed organizations.

CASE STUDY
Employed three fundamental elements of TEI in modeling the impact of Zerto: benefits, costs, 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.

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The Zerto Customer Journey

BEFORE AND AFTER THE ZERTO INVESTMENT

Interviewed Organizations

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

INDUSTRY	GEOGRAPHY	INTERVIEWEE	USE CASE
Pharmaceutical	Global	Director, technology engineering	Organization has 4,000 VMs and 85% of data center is virtualized.
Financial services	North America	Director, information technology	Organization has 225 VMs and about 80% of data is virtualized.
Financial services	Global	Infrastructure technologist	Organization has 14,000 VMs and is 95% virtualized.
Manufacturing	Global	Senior engineer	Organization has 250 VMs and is growing at 20% per year.

Key Challenges

After conducting interviews with four companies, Forrester identified the following challenges that they experienced prior to adopting Zerto. The challenges included:

- **Increased need to avoid downtime in an always-on society.** The manufacturing company engineer told Forrester: **"**We live today in an always-on society. Whenever we do any kind of technical change or upgrade, we must work around major holidays and even those windows of time are getting shorter. The expectation is that ERP systems, file servers, printers, and every other device will always be available."
- **Struggled with incomplete backup jobs that never completed.** The director at one company explained: "We had backups that never ended even after running for 24 hours. Our team had to kill the job to export the tape and ship it offsite." Another executive said: "One of our databases literally cannot be down. Previously, we would perform a hot backup and snapshot via the storage."
- **Responded to ransomware attacks.** Another director said: "About once every year, one of our systems gets hit with ransomware. On one occasion, it disabled the LTO tape and the tape could not be catalogued after that. It took us about two weeks to recover from that outage."
- **Found that previous tools became obsolete.** One executive said: "We were running DR for our VMs on [a previous tool] and we reached its limits, not only with the application itself, but we also starting using [some additional applications]."

> "We live today in an always-on society. Whenever we do any kind of technical change or upgrade, we must work around major holidays and even those windows of time are getting shorter. The expectation is that ERP systems, file servers, printers, and every other device will always be available."
>
> *Senior engineer, manufacturing company*

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Solution

Buyers emphasized the following attribute as a key factor in purchasing from Zerto:

- **Converting proof of concept to production seamlessly.** The manufacturing executive told Forrester: "We got our license and applied the license to the proof of concept (POC) environment that we had set up. There was no changing to setup storage. No binding VMs to specific hosts. All of those challenges went out the door because we could literally switch our POC into production."

Key Results

The interviews revealed that key results from the Zerto IT Resilience Platform investment include:

- **Reducing the cost of managing data and applications remotely.** One executive said: "I manage the environment myself using a mobile app. It has alerts that warn me of any problems, but as long as everything is green, then I'm good. I no longer have to clean up things like the Data Domain disk utilization, disk consumption, or set journals. This saves a lot of time that I can use to make sure that our DR meets business needs."
- **Reducing the risk for migrations and updates.** A director said: "The cloud-based platform gave us the ability to perform migrations in very little time. We were able to go through multiple iterations of testing and validating the new environment before we went live. This was important because we acquire a lot of manufacturing companies and many of them have obsolete equipment, which requires extensive testing before migrating." Another executive added: "A typical migration would have involved three different teams across our company. In the end, it would have required at least 8 hours of downtime for the business. Using Zerto, we were able to migrate thousands of VMs with no data loss and literally a reboot."
- **Simplifying the process and cost to recover from ransomware.** The manufacturing executive told Forrester: "After we had Zerto up and running, we had another ransomware hit. Rather than taking two weeks to recover, it literally took us one-half of one-second to be back up and running. This capability has gone a long way to rebuild trust with business executives and make them confident that we can recover and maintain business even when problems arise."
- **Planning and automating DR functions.** The financial services executive told Forrester: "We are looking at automating our disaster recovery so that the network work team is notified. We will validate that nothing is running, they drop the firewall, and we'll have a script that runs to not only recover the VMs, but also go into their startup order."
- **Using a single solution for DR and backup.** Another executive said: "As part of moving to Zerto, we've been slowly moving the normal backup process of snapshotting the data storage to Zerto. And as part of doing that process our automation team has begun automating additional functions that previously required manual support."

> "After we had Zerto up and running, we had another ransomware hit. Rather than taking two weeks to recover, it literally took us one-half of one-second to be back up and running. This capability has gone a long way to rebuild trust with business execs and make them confident that we can recover and maintain business even when problems arise."
>
> *Senior engineer, manufacturing company*

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Composite Organization

Based on the interviews, Forrester constructed a composite entity that illustrates the areas financially affected. The composite organization is representative of the companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization has:

- **1,000 VMs growing 20% annually.** Forrester interviewed four organization and the scale of VMs ranged from 250 at the smallest to more than 14,000 at the largest. While the scale of operations varied widely, the experience working with Zerto was similar.
- **Quarterly disaster recovery testing.** The organization runs a quarterly review to test the specific technology products, evaluate DR processes, and ensure successful tools and methods.

Key assumptions:

- 1,000 VMs
- 90% of data center is virtualized
- 20% growth in VMs each year
- Quarterly DR testing

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	Reduced cost of unplanned outages	$850,000	$1,020,000	$1,224,000	$3,094,000	$2,535,312
Btr	Reduced cost of planned downtime	$816,000	$816,000	$816,000	$2,448,000	$2,029,271
Ctr	Avoided cost of software tools displaced by Zerto functionality	$565,250	$193,800	$135,660	$894,710	$775,952
Dtr	Reduced cost of disaster recovery operations	$193,800	$193,800	$193,800	$581,400	$481,952
Etr	Avoided cost of managing backups	$45,900	$45,900	$45,900	$137,700	$114,147
Ftr	Reduced cost of managing technology migrations	$0	$79,650	$0	$79,650	$65,826
	Total benefits (risk-adjusted)	$2,470,950	$2,349,150	$2,415,360	$7,235,460	$6,002,460

Reduced Cost Of Unplanned Outages

Each of the interviewed organizations had a consistent pattern of small outages that disrupted business operations. Sometimes the disruptions impacted customers, hindering employee productivity, ranging from finance to sales teams, and even halting manufacturing productions. On average, the impact of downtime was $10,000 per hour.

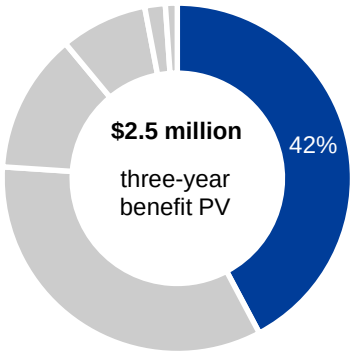
Most organizations suffer a handful of outages every month. The interviewed companies experienced a low of less than four outages per month and a high of dozens of outages, depending on the size of the company and the specific nature of business operations. For example:

- Organizations with retail operations are more susceptible to outages that impact the customer buying experience.
- Manufacturing companies struggle with outages that disrupt assembly lines.

The composite organization had 1,000 VMs in Year 1 and grew 20% per year for a total of 1,440 by Year 3. Each year, using Zerto helped the organization reduce the number of unplanned outages at the rate of one outage for every 10 VMs per year, which equates to just over eight unplanned outages per month in Year 1.

Forrester applied a 15% risk-adjustment to the benefit to account for the wide variation across industries and customers. The savings resulted in a PV savings over three years of over $2.5 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 composite organization expects risk-adjusted total benefits to be a PV of over $6 million.



Reduced cost of unplanned outages: **42%** of total benefits

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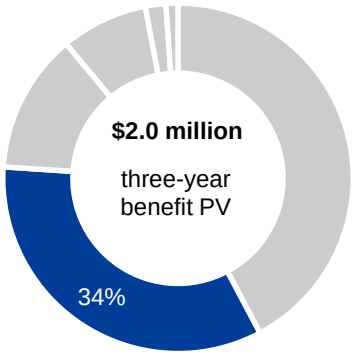
Reduced Cost Of Unplanned Outages: Calculation Table					
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
A1	Number of high-priority VMs	20% growth	750	900	1,080
A2	Number of medium-priority VMs	20% growth	250	300	360
A3	Average percent of VMs that average one hour of downtime per year		10%	10%	10%
A4	Average cost of downtime per hour		$10,000	$10,000	$10,000
At	Reduced cost of unplanned outages	(A1+A2)*A3*A4	$1,000,000	$1,200,000	$1,440,000
	Risk adjustment	↓15%			
Atr	Reduced cost of unplanned outages (risk-adjusted)		$850,000	$1,020,000	$1,224,000

Reduced Cost Of Planned Downtime

In addition to unplanned outages, the organizations told Forrester that they were able also reduce the frequency and duration of planned downtime. Planned downtime is often the result of upgrades, patches, or new releases of technology solution. Business units would often request that the IT organization delay planned outages until holidays, but in today's *always-on* business culture, the interviewed executives indicated that they face fewer and slimmer windows for downtime.

The financial impact of planned downtime is the same as unplanned downtime at a rate of $10,000 per hour. Using Zerto, the organizations were able to avoid one outage each month that would have otherwise required 8 hours of downtime each. Using an average cost for downtime of $10,000 per hour, the organization saved $960,000 per year.

Forrester adjusted this benefit downward by 15%, yielding a three-year risk-adjusted total PV of $2 million.



Reduced cost of planned downtime: **34%** of total benefits

Reduced Cost Of Planned Downtime: Calculation Table					
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	Number of planned outages per year		12	12	12
B2	Average hours of downtime each		8	8	8
B3	Business cost per hour		$10,000	$10,000	$10,000
Bt	Reduced cost of planned downtime	B1*B2*B3	$960,000	$960,000	$960,000
	Risk adjustment	↓15%			
Btr	Reduced cost of planned downtime (risk-adjusted)		$816,000	$816,000	$816,000

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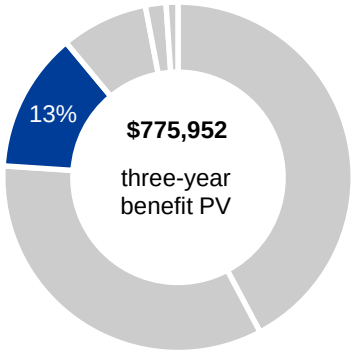
Avoided Cost Of Software Tools Displaced By Zerto

Each of the companies indicated that the functionality of Zerto displaced previous software tools that they purchased. The avoided software tools included:

- **Disaster recovery tools.** The cost of previous disaster recovery tools purchased by the organization for a 1,000 VM environment was $410,000 in the first year and grew 20% per year for perpetual licenses, accumulating a total cost of $590,400 over three years.
- **Backup software.** The organizations used Zerto to replace specific backup and recovery functions, eliminating the need to spend $185,000 in Year 1. This cost also grew 20% per year and totaled $266,400 over three years.
- **Migration tools.** In Year 2 of the model, the organization avoided buying migration tools to managing a major migration project, avoiding a cost of $85,000.

The cumulative financial impact of other software tools that the organization no longer required, resulted in a savings of $894,710 over three years. Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of $775,952.



Avoided cost of software tools displaced by Zerto: **13%** of total benefits

Avoided Cost Of Software Tools Displaced By Zerto: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
C1	Disaster recovery tools		$410,000	$82,000	$98,400
C2	Backup software		$185,000	$37,000	$44,400
C3	Migration tools			$85,000	
Ct	Avoided cost of software tools displaced by Zerto	C1+C2+C3	$595,000	$204,000	$142,800
	Risk adjustment	↓5%			
Ctr	Avoided cost of software tools displaced by Zerto (risk-adjusted)		$565,250	$193,800	$135,660

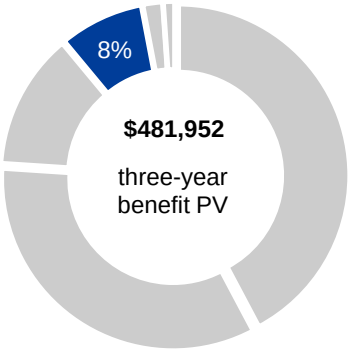
Reduced Cost Of Disaster Recovery Operations

Each of the companies runs periodic testing of its disaster recovery technology and procedures. Prior to using Zerto, the testing required the time of eight employees for three days each quarter, equating to 768 hours by the DR team each year. This equates to the time of 0.4 FTEs.

In addition, the organizations told Forrester that administering the Zerto environment was simpler and allowed employees to focus on addressing business needs rather than managing technical operations. The financial impact of reducing 2.4 FTEs in productivity each year resulted in a savings of $204,000 each year. The labor savings came from:

- Reduced effort for quarterly testing that saved 0.4 FTEs per year.
- Reduced staff required to administer the disaster recovery tools.

Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of $481,952.



Reduced cost of disaster recovery operations: **8%** of total benefits

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Reduced Cost Of Disaster Recovery Operations: Calculation Table					
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
D1	Staff hours required for routine quarterly disaster recovery testing	8 employees for 3 days each quarter	768	768	768
D2	Reduced FTEs for quarterly testing	D1/2,080 hours	0.4	0.4	0.4
D3	Reduced FTEs required to administer disaster recovery environment		2	2	2
D4	Average burdened salary		$85,000	$85,000	$85,000
Dt	Reduced cost of disaster recovery operations	(D2+D3)*D4	$204,000	$204,000	$204,000
	Risk adjustment	↓5%			
Dtr	Reduced cost of disaster recovery operations (risk-adjusted)		$193,800	$193,800	$193,800

Avoided Cost Of Managing Backups

The organizations consistently reported that they previously had backup admins that spent hours each morning confirming backups, checking for completed jobs, and resolving overnight anomalies. The organization was able to save the productivity of 0.6 FTEs and focused their time elsewhere. At an average salary of $85,000, the annual savings was $51,000. Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of $114,147.

Avoided Cost Of Managing Backups: Calculation Table					
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
E1	Number of backup admins		2	2	2
E2	Hours per day spent managing backup problems		2.5	2.5	2.5
E3	FTE years dedicated to backup administration (rounded)	E1*(2.5 hours *260 days/2,080 hours)	0.6	0.6	0.6
E4	Average burdened salary		$85,000	$85,000	$85,000
Et	Avoided cost of managing backups	E3*E4	$51,000	$51,000	$51,000
	Risk adjustment	↓10%			
Etr	Avoided cost of managing backups (risk-adjusted)		$45,900	$45,900	$45,900

Reduced Cost Of Managing Technology Migrations

Lastly, the organization saved the effort required to manage a one-time migration. Although the value of this benefit is nominal within the context of the overall model, it demonstrates the flexibility of Zerto in addressing specific situations. Specifically,

- Migrations that are independent of or agnostic to hypervisors and/or public cloud platforms
- Mergers that result in disparate technologies and require significant consolidations or relocations.

One executive said they previously would have required 8 hours of downtime, but that with Zerto, the migration was literally a few keystrokes, resulting in a benefit of $88,500.

The cloud-based functionality greatly simplified data movement for migration projects. The financial services executive told Forrester: “We just had to move a data center with thousands of VMs. There is no way that we could have met our deadlines without Zerto.”

Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of $65,826.

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.

Reduced Cost Of Managing Technology Migrations: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
F1	FTEs required to manage migration			0.1	
F2	Average burdened salary			$85,000	
F3	Required hours of business downtime			8	
F4	Cost per hour of business downtime			$10,000	
Ft	Reduced cost of managing technology migrations	(B1*B2)+(B3*B4)	$0	$88,500	$0
	Risk adjustment	↓10%			
Ftr	Reduced cost of managing technology migrations (risk-adjusted)		$0	$79,650	$0

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
Gtr	License cost of Zerto for 1,000 VMs growing 20%	$0	$925,000	$416,250	$499,500	$1,840,750	$1,560,199
Htr	Cost to implement and configure Zerto	$22,313	$0	$0	$0	$22,313	$22,313
	Total costs (risk-adjusted)	$22,313	$925,000	$416,250	$499,500	$1,863,063	$1,582,512

License Cost Of Zerto

The companies paid for an environment with 1,000 VMs growing 20% annually per year. The fees were a perpetual license and maintenance fee of 25% paid annually after the first year of the license. The total cost over three years was over $1.8 million and yields a total PV cost over three years of nearly $1.6 million. Because the model is based on list prices for Zerto, Forrester did not risk-adjust this cost

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 composite organization expects risk-adjusted total costs to be a PV of nearly $1.6 million.

License Cost Of Zerto: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
G1	Cost of perpetual license for Zerto			$925,000	$185,000	$222,000
G2	Maintenance fee	$G1_{PY}$*25%			$231,250	$277,500
Gt	License cost of Zerto	G1+G2		$925,000	$416,250	$499,500
	Risk adjustment	↑0%				
Gtr	License cost of Zerto (risk-adjusted)			$925,000	$416,250	$499,500

Cost To Implement And Configure Zerto

The composite organization employed two employees for 50% of their time for three months working to implement and configure Zerto. The cost for the organization was 0.25 FTEs. At a burdened salary of $85,000, the total cost was $21,250. Due to variations in the cost and complexity for readers, Forrester risk-adjusted this cost upward by 5%, yielding a risk-adjusted total of $22,313.

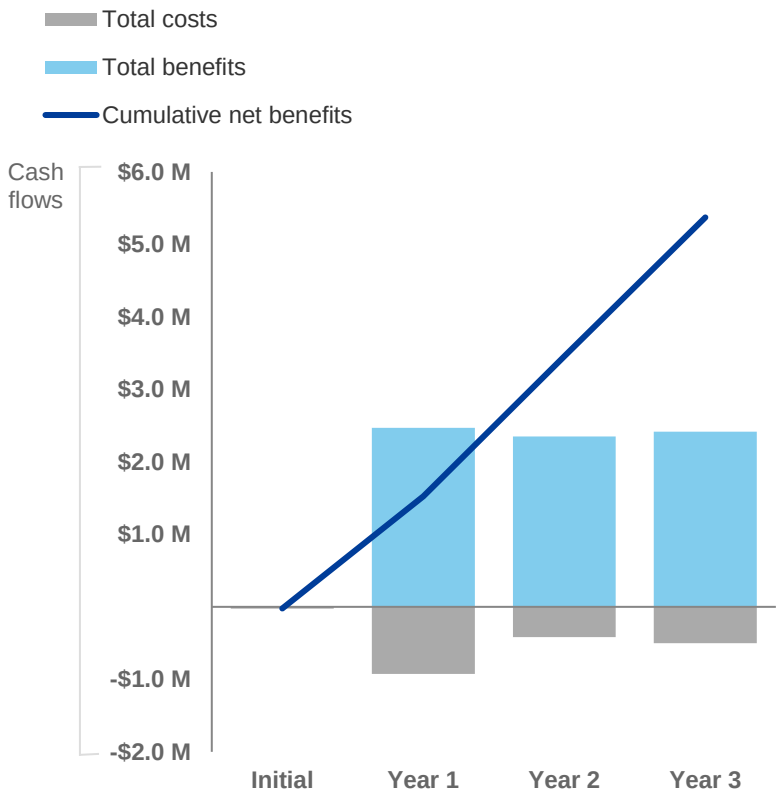
Cost To Implement And Configure Zerto: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
H1	Two employees for three months at 50% of time (FTE years)		0.25			
H2	Average burdened salary		$85,000			
Ht	Cost to implement and configure Zerto	H1*H2	$21,250			
	Risk adjustment	↑5%				
Htr	Cost to implement and configure Zerto (risk-adjusted)		$22,313			

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 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.

Cash Flow Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	($22,313)	($925,000)	($416,250)	($499,500)	($1,863,063)	($1,582,512)
Total benefits	$0	$2,470,950	$2,349,150	$2,415,360	$7,235,460	$6,002,460
Net benefits	($22,313)	$1,545,950	$1,932,900	$1,915,860	$5,372,398	$4,419,948
ROI						279%
Payback period						<3 months

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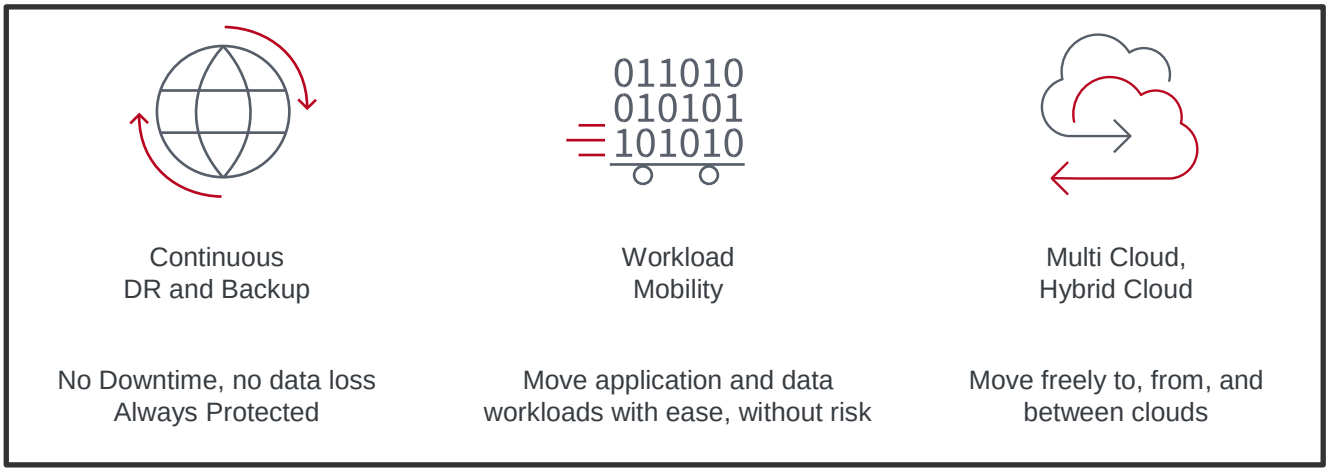
Zerto: Overview

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

Zerto IT Resilience Platform™

Successful businesses are embracing digital transformation and harnessing the power of technology to drive efficiencies, create new experiences, and ultimately beat the competition. These business leaders are relying on their IT organizations to make it happen. Challenged to maximize resources, while faced with the complexity of protecting the business during modernization and transformation efforts, IT leaders are shifting to an IT resilience strategy.

An IT resilience strategy combines continuous backup and disaster recovery, workload mobility, and multicloud agility to ensure you can withstand any disruption, leverage new technology seamlessly, and move forward with confidence.

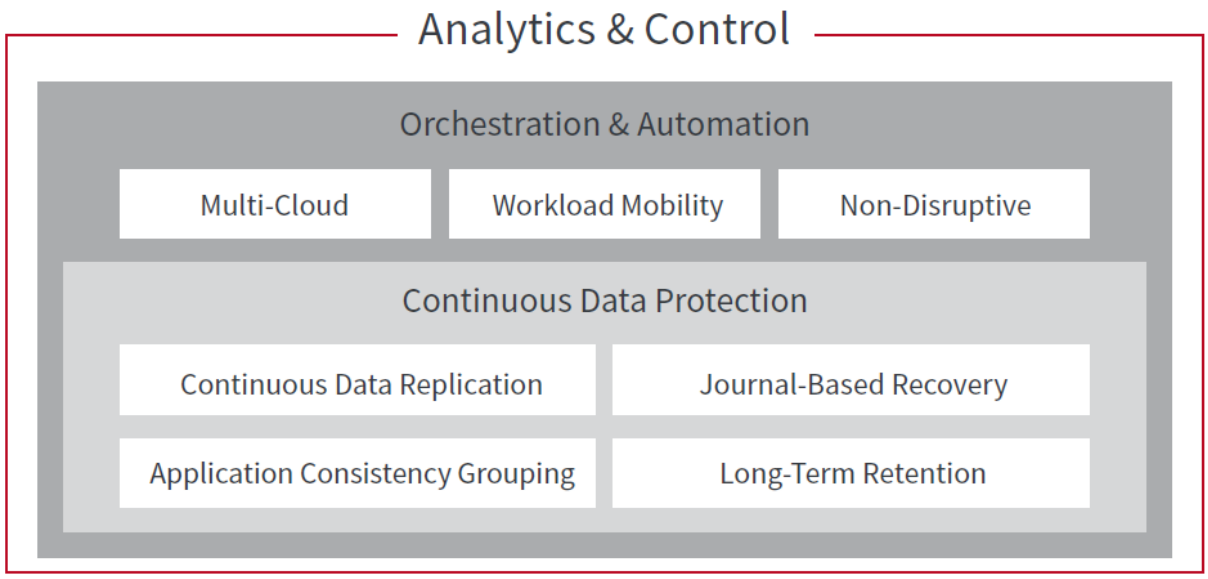


As companies embrace new infrastructures and technologies (like cloud), the complexities of IT rise dramatically. Workloads are becoming more diverse, mobile, and disparate across different platforms and geographic regions. To solve these challenges, IT must look at managing application availability and data recovery through a single IT Resilience Platform™.

The Zerto IT Resilience Platform™ converges backup, disaster recovery, and cloud mobility into a single, simple, scalable platform to reduce the costs and complexities of multiple solutions.

The platform is based on a foundation of continuous data protection, it's at the core of enabling resilience.

IT can't modernize and innovate if solutions are not automated and simple. With Zerto, Orchestration and Automation are built in, ensuring simplicity is at the core of the experience. Analytics and Control provide complete visibility across multisite, multicloud environments to ensure that service-level agreements (SLAs) of the business are met.



Continuous Data Protection

Continuous Data Protection with best-of-breed replication delivers the tightest recovery time objectives (RTOs) and RPOs to ensure that when something happens, recovery is quick or when proactive changes like migrations are done it is possible to just rewind if there is a change to the plan at the last-minute.

- Continuous journal-based recovery allows you to rewind to any point in time with protection against both logical failures and disasters. Recovery is granular and can be from seconds ago, unlike backup or snapshot capabilities that could be hours or days old. Recovery can be a site, application, VMs, or individual files.
- Recovery is not just about data — it's about protecting your key business services. The platform uses application consistency groups called virtual protection groups (VPG) — these enable customers to protect applications with all their dependencies. VPGs allow you to preconfigure recovery workflows (e.g., boot order, IP address changes, etc.) for fast recovery with no manual intervention.
- The platform addresses your needs for long-term retention of data and applications for compliance requirements.

Orchestration And Automation

Orchestration and Automation is built in to enable faster management of workloads at scale with minimal touch, allowing IT to shift resources to focus on innovation and implementing services that help the business run more efficiently.

- Supporting your multicloud and hybrid cloud strategies, the platform supports Azure, IBM Cloud, AWS, and over 350 cloud service providers.
- From migrations to consolidations, confidently move workloads and data across heterogeneous environments.
- Non-disruptive everything — like testing and compliance — is also a critical component to a resilient infrastructure. The Zerto IT Resilience Platform™ goes beyond disaster recovery allowing you to make your business more efficient.

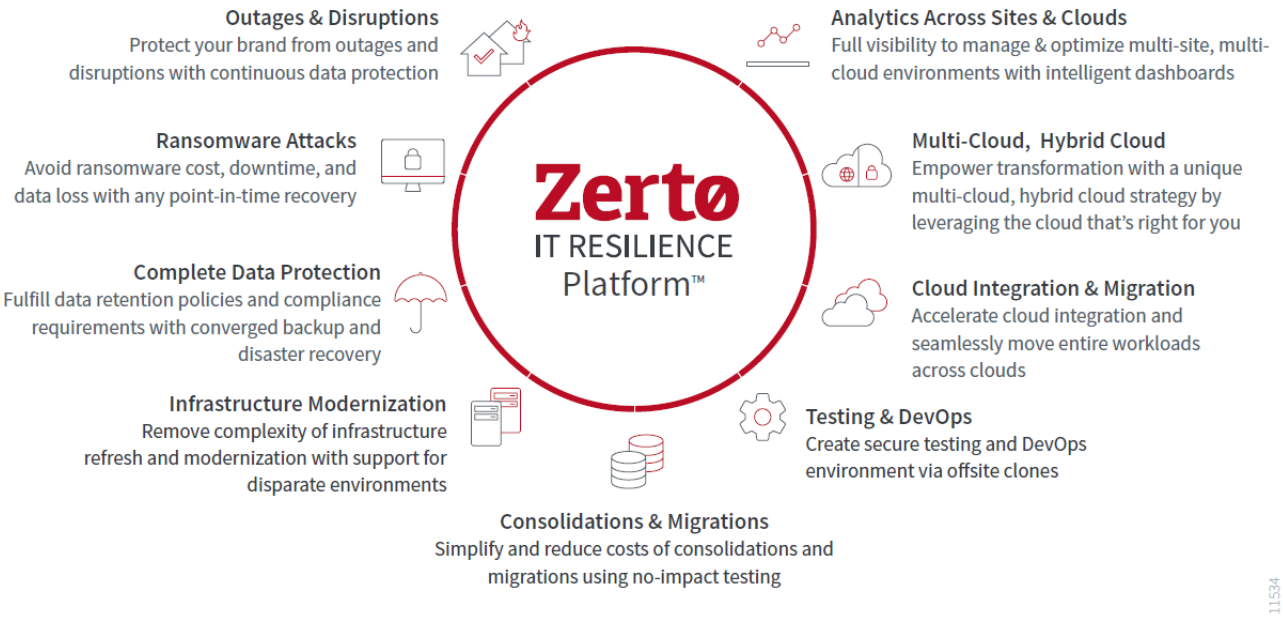
Analytics And Control

Analytics and Control empowers enterprises to optimize, troubleshoot, and plan with complete visibility across multisite, multicloud environments.

- Intelligent dashboards including live and historical data gathered with Zerto Analytics help businesses meet SLAs and remain compliant.
- Full-featured APIs allow organizations to tightly integrate IT resilience with existing system management, automation, orchestration, and analytics tools for operational excellence.

Summary

Zerto provides a single, scalable platform built for continuous availability with complete data protection and workload mobility across multi and hybrid-cloud environments.



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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.

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