

FORRESTER®

The Total Economic Impact™ Of Snow Software Asset Management

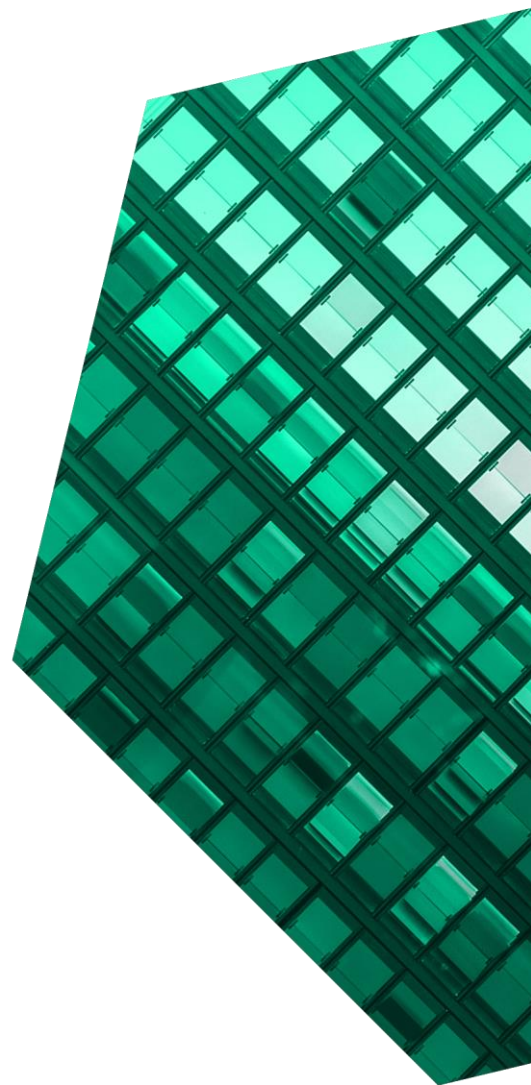
Cost Savings And Business Benefits
Enabled By Software Asset Management

SEPTEMBER 2021

Table Of Contents

Consulting Team: *Sruti Pegatraju*
Sri Prakash Gupta

Executive Summary	1
The Snow SAM Customer Journey	6
Key Challenges	6
Solution Requirements	6
Composite Organization	7
Analysis Of Benefits	8
Optimizing And Controlling Software Spend	8
Productivity And Efficiency Gains	9
Audit Savings Through Improved Visibility	10
Unquantified Benefits	12
Flexibility	12
Analysis Of Costs	13
Licensing, Professional Services, And Training Costs	13
Planning, Ongoing Management, And Resource Costs	14
Financial Summary	16
Appendix A: Total Economic Impact	17
Appendix B: Endnotes	18



ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. For more information, visit forrester.com/consulting.

© Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on the best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies.

Executive Summary

Technology is a central part of every business. It powers operations, drives customer experience, offers insights on the competitive landscape, and for some is the foundation of product or service offerings. The understanding and management of technology assets is vital for an organization's success. Software asset management (SAM) can offer insights to help organizations yield financial benefits, operational efficiencies, and better business outcomes, while minimizing risks.

The [Snow Software Asset Management \(SAM\)](#) solution provides comprehensive visibility and contextual insights across an organization's entire technology environment. It also standardizes software licenses status, enhances savings, and reduces risks. With Snow, IT leaders can effectively optimize resources, drive performance, and enable operational agility in a hybrid world.

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

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four Snow customers with experience using the Snow SAM solution. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single [composite organization](#).

Prior to using the Snow SAM solution, these interviewees used disconnected in-house systems and manual processes to manage their organizations' software assets and technology ecosystems. However, prior attempts yielded limited success, leaving the organizations with unaddressed pain

KEY STATISTICS



Return on investment (ROI)
428%



Net present value (NPV)
\$4 million

points and frustration throughout their software management lifecycle. These limitations led to several issues, including:

- A struggle to manage software license usage and spending.
- The inability to manage growing software needs and demand for modern solutions, including software-as-a-service (SaaS) and cloud infrastructure technologies, that led to complexities and risks in business operations. Evolving licensing models and deployment methods for cloud infrastructure (e.g., public, private, and hybrid environments) exposed even greater cost and licensing risks.
- A lack of understanding about the number of licenses needed. It was more of an estimation. The software procurement process was generally haphazard.

- The inability to determine the total number of software solutions/applications installed in their existing business environment.
- A lack of visibility into software authorization and deployment process, along with a lack of awareness of any misuse or nonauthorized software installations. This resulted in noncompliance, leading to higher risks.

After the investment in the Snow SAM solution, the interviewees experienced benefits, including:

- Full visibility of current software license usage, which led to cost savings and efficiencies including:
 - Savings made by utilizing existing software licenses (i.e., removing unused applications, removing the wrong versions installed, recycling licenses).
 - Savings made on software agreements.
 - Savings made on maintenance and support agreements.
 - Reduced software spending.
- Improved and standardized use of software assets, resulting in resource efficiency, accelerated decision-making, and increased business agility.
- Prepared the organization to be audit ready. The Snow SAM solution improved efficiency in the maintenance of software license compliance controls, fulfilled obligations, and managed risks with a complete and consistent view of software license consumption and usage adherence. This newfound efficiency helped reduce auditing costs and avoid regulatory fines.

“Snow’s SAM solution enabled swift and smart decision-making for software contract negotiations, competitive pricing, and available discounts. With greater visibility into software lifecycle management, the company could plan the license purchase more accurately and re-distribute unused licenses.”

Head of Supplier Governance, Insurance

KEY FINDINGS

Quantified benefits. Risk-adjusted present value (PV) quantified benefits include:

- **Optimized and effective license management, which reduces software spending by more than \$4 million over three years.** The composite organization lacked visibility into software lifecycle management despite making significant software investments. With the Snow SAM solution, the composite organization gained intelligence on what software is required and how many licenses are used and utilized, which led to more effective license management. It helped the composite organization to streamline and standardize the software that they make available to end-users. The Snow SAM solution reduced overall licensing cost by 5%.
- **Productivity and software management efficiencies, which saves more than \$359,000 over three years.** The Snow SAM solution’s unified dashboards, workflow automation, and easy reporting saved SAM team members’ time. It also helped SAM and IT teams to respond faster, more efficiently, and make use of time savings for improvements and innovation. Prior to the Snow SAM, the composite organization needs to dedicate 50% of 5 full time employees’ (FTEs) time to manually report on its SAM environment and produce the same level of insights or visualizations as the Snow SAM solution.

- **Improved audit efficiency, which saves more than \$520,000 over three years.** Improved accuracy, compliance, internal controls, and chain of custody trails gave auditors at the interviewees' organizations a simpler task to verify results. As opposed to fragmented data or manual processes, the Snow SAM solution produces immediate validation for the composite organization's auditors and internal compliance FTEs, saving an average 50% of the time previously required per audit case.

Unquantified benefits. Additional benefits that customers experienced but were not able to quantify include:

- **Improved contract negotiations and plans for renewals.** The Snow SAM solution provided valuable insights to IT leaders to identify the technology spend optimization opportunities and effectively plans for future technology investments. This enables decision-makers to accurately determine license procurement, better negotiate contracts, receive competitive pricing, and secure better discounts.
- **Improved business agility.** With improved software compliance, the interviewees' organizations gained the ability to use applications in any cloud configuration with minimal disruption. Doing so drove digital transformation, flexibility, and speed to innovation.
- **Improved compliance and security posture.** Security teams were better prepared for timely action with the Snow SAM solution's visibility into software and hardware usage. The solution also flagged any unauthorized installations, identified known vulnerabilities, mitigated reputational risks, and prevented financial losses by generating real-time alerts for key stakeholders and decision-makers. Leveraging insights from the Snow SAM's solution increased security, and IT

professionals' confidence concerning the organization's security posture.

Costs. The composite organization experiences implementation costs and annual license fees as highlighted below. Risk-adjusted PV costs include:

- **Snow license, professional services, and training costs of nearly \$528,000 over three years.** The composite organization pays license costs of \$154,000 in the initial period and then in Year 2 and Year 3 for the Snow SAM solution. It also pays \$75,000 as an upfront solution deployment and professional services fee, which includes installation, post-installation support, configuration setup, analysis, and testing. In addition, the composite organization pays \$8,000 for training and consultative services.
- **Planning, ongoing management and resource costs of over \$414,000 over three years.** Interviewees said deployment of the Snow SAM solution was straightforward and required minimal time resources. Successful deployments typically required resources to spend a few days on project feasibility, implementation, and testing. Once the solution is up and running, the composite organization dedicates 50% of the time of two FTEs to oversee, manage, and administer the SAM solution.

Annual license and implementation costs will vary depending on the size and scope of the implementation. Readers are encouraged to contact Snow Software for a quote based on specific requirements and planned business outcomes.

The customer interviews and financial analysis found that the composite organization experiences benefits of nearly \$5 million over three years versus costs of over \$942,000, adding up to a net present value (NPV) of over \$4 million and an ROI of 428% with a payback period in six months.



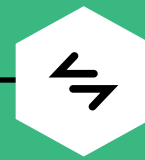
ROI
428%



BENEFITS PV
\$5 million

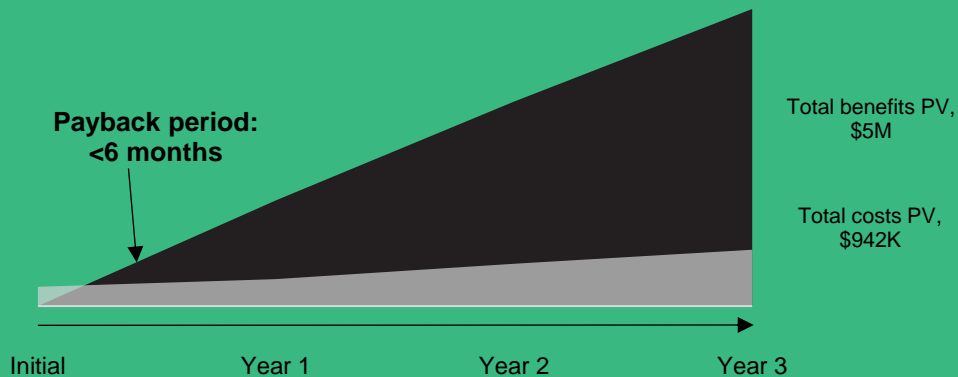


NPV
\$4 million



PAYBACK
6 months

Financial Summary



“With Snow Software, transparency and visibility into software license usage and management became available instantly, which resulted in huge savings. Whereas before, it would not have been possible for us to replicate that effort.”

— IT director, logistics

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 the Snow SAM solution.

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 the Snow SAM solution can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Snow Software 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 the Snow Software Asset Management.

Snow 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.

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



DUE DILIGENCE

Interviewed Snow stakeholders and Forrester analysts to gather data relative to the Snow SAM solution.



DECISION-MAKER INTERVIEWS

Interviewed four decision-makers from organizations using the Snow SAM solution to obtain data with respect to 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 decision-makers.



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.

The Snow SAM Customer Journey

■ Drivers leading to the investment in the Snow SAM solution

Interviewed Decision-Makers			
Interviewee	Industry	Region	Revenue
IT director, license management	Logistics	Headquartered in Europe	\$5 billion
Head of supplier governance	Insurance	Headquartered in Europe	\$3 billion
IT director, asset management	Manufacturing	Headquartered in the US	\$3 billion
Senior IT director, asset management	Public sector	Headquartered in Europe	\$900 million

KEY CHALLENGES

The interviewees noted how their organizations struggled with common challenges before investing in the Snow SAM solution:

- Their organizations struggled to manage software license usage and spending.
- They were unable to manage growing software needs or rapid demand for modern solutions, including SaaS and cloud infrastructure technologies, that led to operational complexities and risks. Evolving licensing models and deployment methods for cloud infrastructure (e.g., public, private, and hybrid environments) exposed bigger gaps in software lifecycle management.
- Their organizations lacked an understanding of the number of licenses they needed. It was more an estimation. The software procurement process was somewhat haphazard.
- They were unable to determine the total number of software solutions/applications installed in their existing business environment.
- They lacked visibility into software authorization and deployment processes, and were also unaware of any misuse or nonauthorized

software installations. This resulted in noncompliance, leading to higher risks.

“The Snow SAM solution allows us to be much more strategic about how we manage our security environment. With the Snow SAM solution, our security team has better visibility on the new software/application installations. Based on the security assessments or non-authorized application downloads – our security team can quickly uninstall the software and alert respective teams.”

IT director, manufacturing

SOLUTION REQUIREMENTS

The interviewees' organizations searched for a solution that could:

- Provide full visibility of current software license usage, cost savings, and efficiency.

- Improve utilization of existing software licenses (i.e., remove unused applications, remove the wrong versions installed, recycle licenses).
- Enhance savings made on software agreements.
- Enhance savings made on maintenance and support agreements.
- Reduce software spending.
- Improve and standardize the use of software assets to boost resource efficiency, accelerate decision-making, and increase business agility.
- Prepare their organizations to be audit ready and protect the business from potential risks.

The interviewees said the Snow SAM solution improved efficiency in software license compliance control and maintenance, fulfilled obligations, and managed risks with a complete and consistent view of data related to software license consumption and usage adherence. This newfound efficiency reduced auditing costs and avoided regulatory fines.

After a request for proposal (RFP) and business case process evaluating multiple vendors, the interviewees' organizations chose the Snow SAM solution and began phased approaches to deployment.

With the Snow SAM solution, the organizations saved costs and automated visibility and control for effective governance of cloud infrastructure (e.g., public cloud, private cloud, on-premises). The Snow SAM technology provided more flexibility and speed to meet business demands.

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and a ROI analysis that illustrates the areas financially affected. The composite organization is representative of the four customers that Forrester interviewed and is used to present the aggregate financial analysis in the next

section. The composite organization has the following characteristics:

Description of composite. The global, multibillion-dollar organization provides sales, customer support, and service/warranty support for its consumer products in high volume. The organization has a strong brand, global operations, a large customer base, and a strong online and offline presence.

Deployment characteristics. The organization has global operations across multiple countries. It uses hundreds of software solutions and SaaS applications to serve customers, partners, and employees. The organization wants to manage the costs and license usage, while minimizing the risk associated with installed software solutions across the technology ecosystem, regardless of platform or location.

Key assumptions

- **Global organization**
- **More than \$1 billion annual revenue**
- **More than 10,000 employees**
- **More than 10,000 Snow agents**

Analysis Of Benefits

■ Quantified benefit data as applied to the composite organization

Total Benefits						
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Optimizing and controlling software spend	\$1,600,000	\$1,648,000	\$1,697,440	\$4,945,440	\$4,091,841
Btr	Productivity and efficiency gain	\$140,400	\$144,612	\$148,950	\$433,962	\$359,059
Ctr	Audit savings through improved visibility	\$203,580	\$209,687	\$215,977	\$629,245	\$520,635
	Total benefits (risk-adjusted)	\$1,943,980	\$2,002,299	\$2,062,368	\$6,008,647	\$4,971,535

OPTIMIZING AND CONTROLLING SOFTWARE SPEND

Evidence and data. Despite making significant software investments, the interviewees' organizations lacked visibility into software lifecycle management starting from initial procurement. Cost optimization and redistribution of software licenses was also a concern for the organizations.

With the Snow SAM solution, the decision-makers gained intelligence on what software is required and how many licenses their organizations used and utilized, which led to effective license management. This streamlined and standardized the software that these organizations made available to their end users. In addition, the interviewees' organizations were better placed for contract negotiations with vendors for renewals or new license agreements.

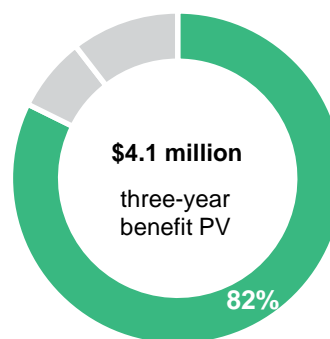
Modeling and assumptions. For the composite organization, Forrester assumes:

- An annual revenue of \$1 billion in Year 1.
- An average 4% of annual revenue spending on software licensing and procurement.
- A cost reduction of 5% in software license management attributed to the Snow SAM solution.

Risks. Savings from software optimization and spend will vary based on:

- The annual revenue of company.
- The average percentage of annual revenue spend on software assets.
- The average percentage of cost reduction with software license management.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of over \$4 million.



Optimizing and controlling software spend: 82% of total benefits

Optimizing And Controlling Software Spend					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Annual revenue	Composite	\$1,000,000,000	\$1,030,000,000	\$1,060,900,000
A2	Percentage of annual revenue spend on software licensing before the Snow SAM solution	Composite	4%	4%	4%
A3	Reduction in licensing cost with the Snow SAM solution due to better control of license provisioning/distribution	Composite	5%	5%	5%
At	Optimizing and controlling software spend	A1*A2*A3	\$2,000,000	\$2,060,000	\$2,121,800
	Risk adjustment	↓20%			
Atr	Optimizing and controlling software spend (risk-adjusted)		\$1,600,000	\$1,648,000	\$1,697,440
Three-year total: \$4,945,440			Three-year present value: \$4,091,841		

PRODUCTIVITY AND EFFICIENCY GAINS

Evidence and data. With the Snow SAM solution, SAM team members at the interviewees’ organizations saved time due to the unified dashboards, workflow automation, and easy reporting. The solution helps SAM and IT teams respond faster and more efficiently, while making use of time savings for improvements and innovation.

Modeling and assumptions. For the composite organization, Forrester assumes that:

- Five FTEs are employed for tracking and reporting software consumption/license violation.
- The efficiency to track software usage improves each year as there is more awareness around license usage and more proficiency around the prevention of unauthorized software. Each FTE experiences time savings of 50%.
- The average fully loaded annual salary of a resource is \$124,800 for Year 1 with a year-on-year increase of 3% for subsequent years.
- To be realistic and conservative with the model, Forrester adjusted the productivity formulas with a productivity conversion ratio. Productivity

conversion assumes that not every minute gained in productivity is put directly back into productive work. Employees could use that time to take longer breaks, leave work on time, etc. Forrester set the productivity conversion ratio for this study at 50%.

Risks. Savings from efficiencies in software asset management and resource productivity will vary based on:

- The number of FTEs involved.
- The time savings per FTE.
- The average cost of a resource.
- The productivity gain per SAM analyst.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of over \$359,000.

Productivity and efficiency gains: 7% of total benefits

Productivity And Efficiency Gains					
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	FTEs responsible for tracking and reporting software consumption/license violation before the Snow SAM solution	Composite	5	5	5
B2	Percentage of FTEs' time saved with the Snow SAM solution	Composite	50%	50%	50%
B3	Average fully loaded salary of FTEs	Assumption	\$124,800	\$128,544	\$132,400
B4	Productivity conversion	Assumption	50%	50%	50%
Bt	Productivity and efficiency gains	B1*B2*B3*B4	\$156,000	\$160,680	\$165,500
	Risk adjustment	↓10%			
Btr	Productivity and efficiency gains (risk-adjusted)		\$140,400	\$144,612	\$148,950
Three-year total: \$433,962			Three-year present value: \$359,059		

AUDIT SAVINGS THROUGH IMPROVED VISIBILITY

Evidence and data. Audits are traditionally complex workflows, requiring rigor and a significant amount of time to complete. Following the deployment of the Snow SAM solution, the interviewees' organizations modernized their audit processes. As the Snow SAM solution was a central point of information collection for everything related to software lifecycle management, it became a natural fit for auditors to work in the same environment. Auditors gained the ability to:

- Identify key risk segments for assessment to lower enterprise risk.
- Track down data ,such as control and process information, with less effort due to visibility into software lifecycle and process automation.
- Properly provision, redistribute, assign, link, and manage the audit trail in a central repository.

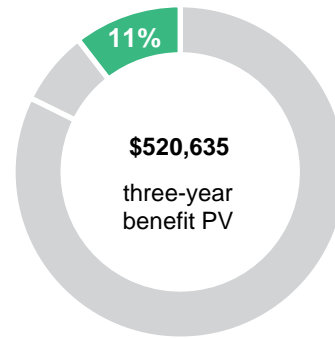
Modeling and assumptions. For the composite organization, Forrester assumes that:

- On average, audit teams consist of internal audit teams (typically software asset management team members) and external audit consultancies (third-party vendors that assist with audit response).
- The efficiency to track software usage improves each year as there is a better software license compliancy. The organization becomes 50% more efficient per audit instance in reducing audit trail time.
- The average hourly cost of internal audit resources is \$65 for Year 1 with a year-on-year increase of 3% for subsequent years.
- The average hourly cost of external audit consultancies is \$225 for Year 1 with a year-on-year increase of 3% for subsequent years.

Risks. To be conservative, Forrester considered the following potential risks when assigning a risk adjustment:

- The frequency of audits each year.
- The average cost of the internal or external auditor.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of over \$520,000.



Audit savings through improved visibility: 11% of total benefits

Audit Savings Through Improved Visibility					
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Frequency of audits per year	Composite	3	3	3
C2	Average time spent per audit before using Snow's SAM solution (in hours)	Composite	520	520	520
C3	Audit trail time reduction due to accuracy in Snow's SAM solution	Composite	50%	50%	50%
C4	Internal audit response cost per hour	Assumption	\$65.00	\$66.95	\$68.96
C5	Audit consultancy cost per hour	Assumption	\$225.00	\$231.75	\$238.70
Ct	Audit savings through improved visibility	$(C1 \cdot C2 \cdot C3 \cdot C4) + (C1 \cdot C2 \cdot C3 \cdot C5)$	\$226,200	\$232,986	\$239,975
	Risk adjustment	↓10%			
Ctr	Audit savings through improved visibility (risk-adjusted)		\$203,580	\$209,687	\$215,977
Three-year total: \$629,245			Three-year present value: \$520,635		

UNQUANTIFIED BENEFITS

Additional benefits that customers experienced but were not able to quantify include:

- **Improved contract negotiations and plans for renewals.** The Snow SAM solution provided valuable insights to IT leaders to identify technology spend optimization opportunities and also enabled these leaders to accurately determine license procurement, better negotiate on contracts, get competitive pricing, and secure better discounts. Doing so helped effectively plan future technology investments.
- **Improved business agility.** The interviewees' organizations gained the ability to use applications in any cloud configuration with minimal disruption due to improved software compliance. This drove digital transformation, flexibility, and speed to innovation.
- **Improved compliance and security posture.** The Snow SAM solution provided visibility into effective license usage and flagged any unauthorized installations, which prepared security teams for timely action. It enhanced the understanding of potential threats, mitigated reputational risks, and prevented financial losses by generating the right alerts. Leveraging the Snow SAM solution helped security and IT professionals become more confident about their organizations' software solutions.

FLEXIBILITY

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

- **Improved SaaS governance.** The Snow SAM solution helps organizations optimize their SaaS application portfolio by tracking apps

consumption and flagging apps to retire, replace, or renegotiate.

- **IT and business alignment.** With improved compliance, risk management, and visibility of technology ecosystem, both IT and business leaders can target tech budgets, trim costs, develop accurate forecasting into future technological investments.

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 as applied to the composite organization

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Dtr	Licensing, professional services, and training costs	\$260,700	\$0	\$169,400	\$169,400	\$599,500	\$527,973
Etr	Planning, ongoing management, and resource costs	\$63,360	\$137,280	\$141,398	\$145,631	\$487,670	\$414,433
	Total costs (risk-adjusted)	\$324,060	\$137,280	\$310,798	\$315,031	\$1,087,170	\$942,406

LICENSING, PROFESSIONAL SERVICES, AND TRAINING COSTS

Evidence and data. Interviewees said that deploying the Snow SAM solution included paying license, professional services, and training costs.

Modeling and assumptions. For the composite organization, Forrester assumes that:

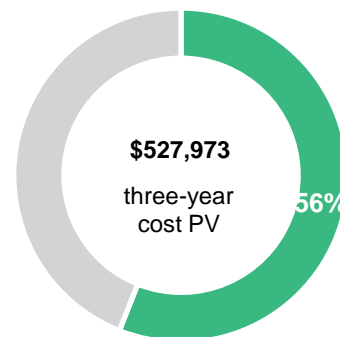
- The composite organization pays the license costs of \$154,000 in the initial period and then in Year 2 and 3 for the Snow SAM solution.
- The composite organization pays \$75,000 in upfront solution deployment and professional services fees.
- The composite organization pays for a professional service partner at the beginning of its deployment to help with its implementation journey. This fee includes support during installation, configuration setup, analysis, testing, and after installation.
- The composite pays \$8,000 in the initial period for training support and consultative services.

Please note that Forrester modeled these costs based on high-level estimates. For a more detailed business case, please contact Snow Software.

Risks. Implementation costs will vary depending on:

- The complexity of the deployment.
- The size and scope of the implementation

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 over \$527,000.



Licensing, professional services, and training costs: 56% of total costs

Licensing, Professional Services, And Training Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
D1	License costs	Composite	\$154,000	\$0	\$154,000	\$154,000
D2	Professional services/consultation	Assumption	\$75,000	\$0	\$0	\$0
D3	Training costs	Assumption	\$8,000	\$0	\$0	\$0
Dt	Licensing, professional services, and training costs	D+D2+D3	\$237,000	\$0	\$154,000	\$154,000
	Risk adjustment	↑10%				
Dtr	Licensing, professional services, and training costs (risk-adjusted)		\$260,700	\$0	\$169,400	\$169,400
Three-year total: \$599,500			Three-year present value: \$527,973			

PLANNING, ONGOING MANAGEMENT, AND RESOURCE COSTS

Evidence and data. Interviewees said deployment of the Snow SAM solution was straightforward and required minimal resource time. Successful deployments typically required resources to spend a few days on project feasibility, implementation, and testing. Specific due diligence and implementation tasks included:

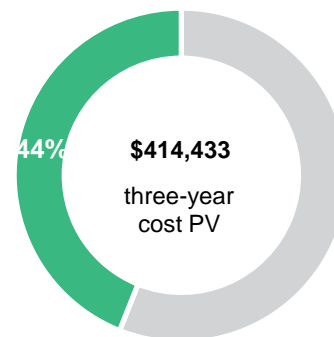
- Collaborating with Snow representatives to understand how its SAM solution could automate and provide full visibility and usage insights across software assets, SaaS, and hybrid applications.
- Working with Snow representatives on requirements, platform setup, network and environment integration, configuration, testing, and customization.

Modeling and assumptions. Forrester assumes that, after the composite organization has the Snow SAM solution up and running, it dedicates 50% of the time of two FTEs to oversee, manage, and administer the technology.

Risks. Planning, ongoing management, and resource costs will vary depending on:

- The complexity of deployment.
- The size and scope of the implementation.
- The cost of a resource.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of over \$414,000.



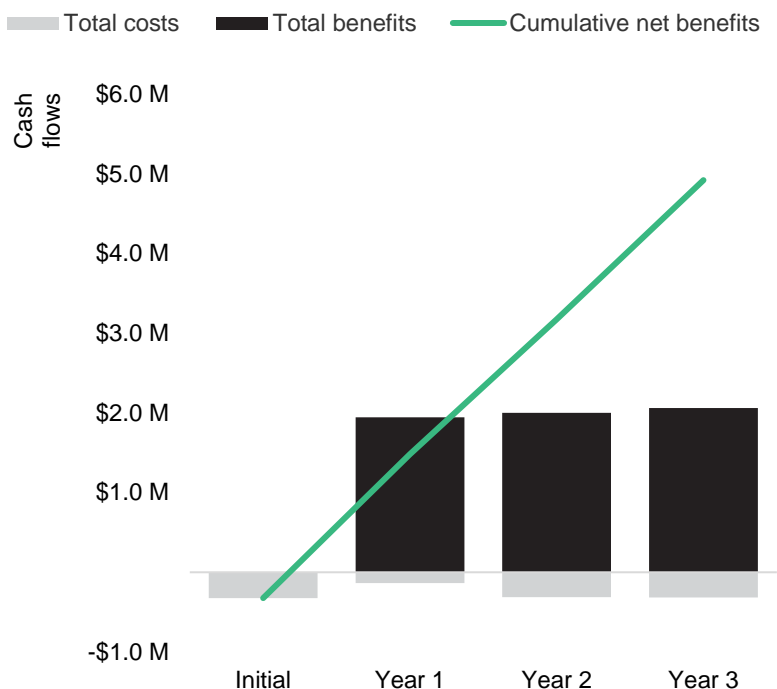
Planning, ongoing management, and resource costs: 44% of total costs

Planning, Ongoing Management, And Resource Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
E1	FTEs required for planning, testing, and implementations	Assumption	8	0	0	0
E2	Ongoing management, support, and administration	Assumption	0	2	2	2
E3	Hours spend	Composite	120	1,040	1,040	1,040
E4	Average hourly cost of FTE	Assumption	\$60.00	\$60.00	\$61.80	\$63.65
Et	Planning, ongoing management, and resource costs	$(E1 \cdot E3 \cdot E4) + (E2 \cdot E3 \cdot E4)$	\$57,600	\$124,800	\$128,544	\$132,392
	Risk adjustment	↑10%				
Etr	Planning, ongoing management, and resource costs (risk-adjusted)		\$63,360	\$137,280	\$141,398	\$145,631
Three-year total: \$487,670			Three-year present value: \$414,433			

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 Analysis (Risk-Adjusted Estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$324,060)	(\$137,280)	(\$310,798)	(\$315,040)	(\$1,087,179)	(\$942,413)
Total benefits	\$0	\$1,943,980	\$2,002,299	\$2,062,368	\$6,008,647	\$4,971,535
Net benefits	(\$324,060)	\$1,806,700	\$1,691,501	\$1,747,327	\$4,921,468	\$4,029,122
ROI						428%
Payback						<6

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.

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 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.

FORRESTER®