A Forrester Total Economic Impact™ Study Commissioned By Pathlock

PLEASE NOTE: In this case study, the customer chose to use Pathlock alongside SAP GRC. Pathlock also offers an independent SaaS and onpremise offering.

The Total
Economic Impact™
Of Pathlock
Access Violation
Management (AVM)
Solution

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ABOUT FORRESTER CONSULTING

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Quantified Benefits



Labor savings — managing data and reporting:

\$1,014,636



Labor savings — compliance and audit:

\$507,318



Savings in external auditors' fees:

\$264,228

Total quantified benefits: \$1,786,181 (risk- and PV-adjusted)

Executive Summary

Pathlock provides an Access Violation Management (AVM) solution that helps its customers eliminate manual mitigating controls for segregation of duties (SoD). Pathlock commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and objectively examine the potential return on investment (ROI) enterprises may realize by deploying its Access Violation Management solution. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the Access Violation Management solution on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed a customer with three years of experience using the AVM solution. Previous to investing in Pathlock AVM, the interviewed *Organization* had a variety of manual control processes to manage segregation of duties. It took the business about 45 days to manually review a month's worth of data; this timeframe is not enough time to keep up with the data streams or compliance and audit requirements. The customer has requested to be anonymous.

Key Findings

Quantified benefits. The interviewed organization experienced the following risk-adjusted present value quantified benefits (see the Financial Analysis section for more details):

- Labor savings managing data, reporting, and disposition (\$1,014,636). Previous to deploying Pathlock AVM, the Organization had two contractors (a compliance analyst and a control analyst) responsible for the following: populating Microsoft Access and Excel databases with appropriate and accurate data from their ERP systems, generating reports, working with business staff from 14 countries, and following up on results. In addition, there were 24 man-months of time and effort saved annually across business staff reviewing and dispositioning reports.
- Labor savings compliance and audit (\$507,318). After deploying Pathlock AVM, the Organization experienced fewer sample tests, fewer control tests, and fewer multiple mitigating controls. AVM also supported control consistency, ensuring controls are the same for each risk, each country, and each business.
- > Savings in external auditor fees (\$264,228). The *Organization* reported savings in external auditor fees. Previous to Pathlock AVM, external auditors spent a significant amount of time extracting transactional data from various sources and doing a manual re-performance of the activities to determine appropriate segregation of duties.

Unquantified benefits. The interviewed *Organization* experienced the following benefit, which is not quantified in this study:

Fraud prevention. The Organization's interviewee could not confirm whether it was able to recover money from a fraudulent action, although it's clear that one purpose of Pathlock AVM is to detect fraud across a rolling twelve-month overview period.

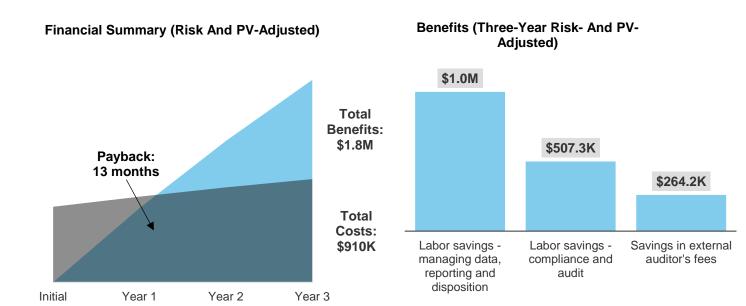


Costs. The *Organization* experienced the following present value costs:

- Labor to implement and maintain Pathlock AVM (\$399,474). This includes labor to perform technical development, pre-planning, implementation, and supporting and maintaining the Pathlock AVM solution.
- Pathlock and SAP fees (\$510,939). Fees included the initial pilot, professional services, Pathlock software licenses and maintenance, and SAP licenses (connectors) and maintenance.

Forrester's interviews and subsequent financial analysis found that the *Organization* experienced benefits of \$1,786,181 over three years versus costs of \$910,413, adding up to a net present value (NPV) of \$875,768, with a payback period of 12.9 months and an ROI of 96%.

If risk-adjusted costs, benefits, and ROI still demonstrate a compelling business case, it raises confidence that the investment is likely to succeed because the risks that threaten the project have been taken into consideration and quantified. The risk-adjusted numbers should be taken as "realistic" expectations, as they represent the expected value considering risk. Assuming normal success at mitigating risk, the risk-adjusted numbers should more closely reflect the expected outcome of the investment.



TEI Framework And Methodology

From the information provided in the interview, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering investing in the Pathlock Access Violation Management 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 Pathlock Access Violation Management solution can have on an organization:



The TEI methodology

demonstrate, justify,

tangible value of IT

senior management

initiatives to both

and other key

stakeholders.

business

helps companies

and realize the

DUE DILIGENCE

Interviewed Pathlock stakeholders to gather data relative to the Access Violation Management solution.



CUSTOMER INTERVIEW

Interviewed an *Organization* using the Access Violation Management solution 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 the Pathlock Access Violation Management solution'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 Pathlock 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 the Pathlock Access Violation Management solution.

Pathlock 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.

Pathlock provided the customer name for the interview but did not participate in the interview.



The Access Violation Management Solution Customer Journey

BEFORE AND AFTER THE ACCESS VIOLATION MANAGEMENT SOLUTION INVESTMENT

Interviewed Organization

For this study, Forrester conducted in-depth interviews with a Pathlock Access Violation Management solution customer:

- The customer is a large company doing business globally. It has requested to be anonymous in this study.
- It has been using the Pathlock AVM solution on two SAP systems (two different business units) for about three years to automate its legacy processes and help eliminate highly manual mitigating control processes for segregation of duties.
- Forrester conducted in-depth interviews with the head of information security.

Key Challenges And Goals

The *Organization*'s head of information security shared the following issues, drivers, challenges, goals, and opportunities:

- It wanted to eliminate manual processes. Previous to investing in Pathlock AVM, the Organization was producing monthly compensating control reports for 14 countries to identify segregation of duties issues. This process used Microsoft Access to manage and produce queries of the data. This highly manual process was a drain on people resources to produce the reports and a drain on system resources to download the information from SAP.
- Efficient reporting was a goal. One objective was to implement SAP's Advanced Business Application Programming (ABAP) programs, which output all the required reports and will gather and join only the required tables and fields in the selected report listed. As a future result, specific downloaded data will be extracted, as opposed to the previous mass downloads that jeopardized systems' performance and consumed a lot of labor resources.
- The Organization wanted to eliminate system performance issues. Automating the segregation of duties reports will be beneficial, as the production of the reports will not consume as many resources as the previous process. Furthermore, it will be able to schedule report production at specific times of the day when the system resources are more available, i.e., during late evening hours.
- The legacy environment had too many manual control processes and custom querying. Every month, IT would collect all the segregation of duties-related data from various sources and put it into a central repository. This manual work was never ending (pre-AVM), and every month all the segregation of duties custom data output had to be reviewed and dispositioned by multiple business owners across multiple countries. On average, they took 45 days to complete this "monthly" manual monitoring process.

"From a logical architecture and technical perspective, we wanted to make sure that we deployed AVM as efficiently and as fast as possible, with the largest coverage as possible. We were able to reduce the time it took to review our segregation of duties by 94%. Our cycle could run every day if we wanted it to."

Head of information security, the Organization





- The legacy environment had more SoD risks defined than needed. Previous to deploying AVM, the Organization had an unwieldly number of theoretical SoD rules. It was able to reduce the number of access control rules by 30%. This resulted in a reduction in the number of segregation of duties risk IDs and contributed to the labor savings described in the Benefits section.
- Audit issues. Previous to AVM, the Organization was challenged with proving to external auditors that segregation of duties was under control. The external auditors now spend fewer billable hours performing audit testing, i.e., they do fewer sample tests and fewer control tests and have fewer multiple mitigating controls.

Key Results

The interview revealed several key results attributed to the Access Violation Management solution investment as follows:

- AVM correlating transactions and users. Today, AVM is reaching into the ERP systems, looking at 100% of the transactions and correlating them to the users who perform those transactions. If there are exceptions, the business owner gets a notification with a link into AVM so they can take action and/or close out the record.
- A reduction of applicable user access risks. The Organization was able to reduce the number of segregation of duties risk IDs or rules by 30% as a result of Pathlock AVM.
- Ninety percent more coverage of historical data. Pathlock AVM enabled the *Organization* to have visibility into 90% more coverage in historical data, i.e., the ability to go back 12 months instead of one month pre-AVM.
- **Labor savings.** The *Organization* saw headcount reductions in managing data and reporting, compliance, and audits.
- Ninety percent faster data. The Organization now gets more accurate data faster. It can spend more time reviewing and analyzing more current data content versus questioning the data reliability and spending time dealing with false positives.
- A 94% reduction in the number of SoD users who review reports. Pathlock AVM solution allowed the *Organization* to reduce the number of potential SoD users to include only real SoD users.
- Reduced external auditor fees. Prior to AVM, the Organization's external auditors would conduct a manual re-performance of a sample of segregation of duties activities. With AVM, all the activities reside in the AVM database, saving the auditors time and saving the Organization significant external audit fees.
- Business process enhancements. For example, AVM provides the Organization with insights into how the business operates so it can make business process changes where appropriate.

Forrester question: "How soon after adopting Pathlock AVM did you start seeing benefits?"

CISO answer: "We went live with AVM in all 14 countries, and the business started to use it quickly; I would say adoption was immediate, as was the initiation of quantifiable benefits"

Head of information security, the Organization



Key Results Other Customers Have Experienced

- A reduction in financial risk. By providing business stakeholders with visibility into the actual bottom-line or financial impact of risks, other Pathlock AVM customers move beyond the potential or theoretical risk in order to focus on or prioritize activities based on actual issues affecting the business. Examples include:
 - Implement Pathlock continuous monitoring program to automate traditional manual activities.
 - Eliminate manual mitigating controls for segregation of duties.
 - Move to exception-based monitoring for actual segregation of duties conflicts that occur during transaction processing.
 - Quantify financial exposure from access risk to drive change where the risk may be perceived as too great.

"Using Pathlock AVM, we can get the data a lot quicker, meaning it's fresher; nothing has changed in the meantime. Now I have confidence I'm working on more reliable and current data."

Head of information security, the Organization



Financial Analysis

QUANTIFIED BENEFIT AND COST DATA

Total	Benefits					
REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Labor savings — managing data, reporting, and disposition	\$408,000	\$408,000	\$408,000	\$1,224,000	\$1,014,636
Btr	Labor savings — compliance and audit	\$204,000	\$204,000	\$204,000	\$612,000	\$507,318
Ctr	Savings in external auditors' fees	\$106,250	\$106,250	\$106,250	\$318,750	\$264,228
	Total benefits (risk adjusted)	\$718,250	\$718,250	\$718,250	\$2,154,750	\$1,786,181

Labor Savings — Managing Data, Reporting, And Disposition

Previous to deploying Pathlock AVM, the *Organization* had two contractors (a compliance analyst and a control analyst) responsible for highly manual tasks, including populating Microsoft Access and Excel databases with appropriate and accurate data, generating reports, working with business staff from 14 countries, and following up on results. The use of AVM resulted in:

- A reduction in IT contractors. The Organization was able to eliminate both contractors after deploying Pathlock AVM due to the elimination of highly manual tasks listed above. AVM provides the remaining compliance staff with the ability to automatically run exception and closed/open issues reports.
- A reduction in time and effort to review reports. With AVM, the Organization was able to reduce the number of segregation of duties risk IDs and rules, resulting in reduced time and effort on the part of business staff reviewing the reports. Across the 14 countries, the Organization was able to reduce the time and effort associated with reviewing and dispositioning access violation reports. Across all reviewers, the savings equated to 24 man-months of time annually.

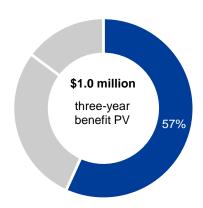
Modeling and assumptions. Forrester assumed an industry average fully loaded cost of \$120,000 for the analysts and business review staff.

Risks. Forrester considered the following potential risks when assigning a risk adjustment:

- Other organizations may see delays in attrition of redundant headcount, resulting in delays in achieving the savings.
- Readers' labor costs may be less than \$120,000 (fully loaded), thereby reducing the labor savings benefits.
- Other organizations may experience slower rollout and adoption of the functionality of AVM.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year risk-adjusted total PV of \$1,014,636.

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 more than \$1.7 million.



Labor savings — managing data, reporting and disposition — 57% of total benefits



Labor	abor Savings — Managing Data, Reporting, And Disposition				
REF.	METRIC	CALC./SOURCE	YEAR 1	YEAR 2	YEAR 3
A1	Compliance analyst saved	1 contractor	\$120,000	\$120,000	\$120,000
A2	Controls analyst saved	1 contractor	\$120,000	\$120,000	\$120,000
А3	Report review savings – 24 man-months of time annually	24 man-months	\$240,000	\$240,000	\$240,000
At	Labor savings — managing data, reporting, and disposition	A1 + A2 + A3	\$480,000	\$480,000	\$480,000
	Risk adjustment	↓15%			
Atr	Labor savings — managing data, reporting, and disposition (risk-adjusted)		\$408,000	\$408,000	\$408,000

Labor Savings — Compliance And Audit

Reduced compliance and audit costs. After deploying Pathlock AVM, the compliance and audit staff experienced fewer sample tests, fewer control tests, and fewer multiple mitigating controls. Pathlock AVM also supported control consistency, ensuring controls are the same for each risk, each country, and each business. With AVM, the *Organization* experienced:

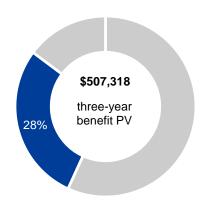
- More "system" visibility into transactional data and closed and still open issues, which helps document compliance to auditors.
- Fewer risk categories and fewer and more accurate segregation of duties reports to follow up with to ensure compliance.
- Segregation of duties data and reports that are now available much faster: daily if necessary versus trailing monthly before Pathlock AVM, according to the *Organization*'s head of information security.

Modeling and assumptions. Forrester assumed an industry average fully loaded cost of \$120,000 for the analysts and business staff.

Risks. Forrester considered the following potential risks when assigning a risk adjustment:

- Other organizations may see delays in attrition of redundant headcount, resulting in delays in achieving the savings.
- Readers' labor costs may be less than \$120,000 (fully loaded), therefore reducing the labor savings benefits.
- Other organizations may experience slower rollout and adoption of the functionality of AVM.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year risk-adjusted total PV of \$507,318.



Labor savings — compliance and audit — 28% 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.



Labor	Savings — Compliance And Audit				
REF.	METRIC	CALC./SOURCE	YEAR 1	YEAR 2	YEAR 3
B1	Compliance analyst saved	0.5 FTE	\$60,000	\$60,000	\$60,000
B2	Controls analyst saved	0.5 FTE	\$60,000	\$60,000	\$60,000
В3	Business staff (fractions of many staff)	B1 + B2	\$120,000	\$120,000	\$120,000
Bt	Labor savings — compliance and audit		\$240,000	\$240,000	\$240,000
	Risk adjustment	↓15%			
Btr	Labor savings — compliance and audit (risk-adjusted)		\$204,000	\$204,000	\$204,000

Savings In External Auditors' Fees

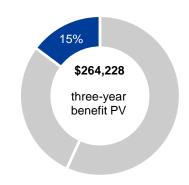
Previous to Pathlock AVM, external auditors would spend considerable amounts of time extracting transactional data from various sources and doing a manual re-performance of the activities to test and confirm appropriate segregation of duties.

- With Pathlock AVM, the external auditors spend fewer billable hours performing audit testing, i.e., they do fewer sample tests and fewer control tests and have fewer multiple mitigating controls.
- With AVM, it's easier to control audit and process consistency, ensuring the controls are the same for each risk, each country, and each business.

Risks. Forrester considered the following potential risks when assigning a risk adjustment:

- > Since this is an estimate, it has been risk adjusted.
- Readers of this study may have different savings outcomes.
- > External auditors' fees have wide ranges for the same work.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year risk-adjusted total PV of \$264,228.



Savings in external auditors' fees: 15% of total benefits

Saving	s In External Auditors' Fees				
REF.	METRIC	CALC./SOURCE	YEAR 1	YEAR 2	YEAR 3
C1	Savings in external auditors' fees	Industry averages	\$125,000	\$125,000	\$125,000
Ct	Savings in external auditors' fees		\$125,000	\$125,000	\$125,000
	Risk adjustment	↓15%			
Ctr	Savings in external auditors' fees (risk-adjusted)		\$106,250	\$106,250	\$106,250



Unquantified Benefits

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

Fraud prevention. The Organization's interviewee could not confirm whether it was able to recover money from a fraudulent action, although it's clear that the main purpose of Pathlock AVM is to provide comprehensive detective controls for known risks, which, in turn, can detect fraud quicker than manual processes or sampling.

Flexibility

The value of flexibility is clearly unique to each customer, and the measure of its value varies from organization to organization. There are scenarios in which a customer might choose to implement Pathlock solution and later realize additional uses and business opportunities. There are two future flexibility options that the *Organization* is considering:

- Pathlock Financial Risk Analytics (FRA). The active use of Pathlock FRA functionality in asset-intensive industries for performance improvements is described as follows:
 - Continuously monitor risks and recommend actions to improve financial performance for relevant processes.
 - Continuously monitor supply and demand balancing of critical assets and suggest improvement actions.
 - Enable better risk-adjusted budgeting, forecasting, and planning for capital projects.
 - Supply analytics and recommendations on supplier risks, disruptions, and consolidation.
- Future integration with other internal businesses.
 - Pathlock AVM can facilitate the integration with non-SAP systems to extend segregation of duties mitigation.
 - The Organization has more internal businesses that want to use AVM.
 - For these other businesses, the Organization can develop segregation of duties processes much more efficiently and target them at the real risks versus the potential risks.

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

"We've deployed Pathlock AVM on two SAP instances. I think by having a sustainable, market solution that fully understands SAP, we increase the reliability of the results."

Head of information security, the Organization

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



Total	Costs						
REF.	COST	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Dtr	Labor to implement and maintain Pathlock AVM	\$300,000	\$40,000	\$40,000	\$40,000	\$420,000	\$399,474
Etr	Pathlock and SAP fees	\$367,000	\$57,880	\$57,880	\$57,880	\$540,640	\$510,939
	Total costs	\$667,000	\$97,880	\$97,880	\$97,880	\$960,640	\$910,413

Labor To Implement And Maintain Pathlock AVM

This cost includes the labor to perform technical development, preplanning, implementation, and supporting and maintaining the Pathlock AVM solution:

- **Implementation costs.** The following tasks and projects are included in the initial \$300,000 cost:
 - o Pathlock assisted the *Organization* in identifying the risks that needed to be mitigated using preconfigured controls. Prior to executing, Pathlock and the *Organization* conducted testing and validation to make sure the controls were picking up what they expected and not providing any false reports. Pathlock helped the *Organization* have a better understanding of the business functionality within SAP to understand if the risks were appropriate for the *Organization*.
 - Pathlock and the *Organization* co-developed a library of additional segregation of duties rules.
- Third-party technical support. The Organization uses a third party to provide technical support for AVM. It is the equivalent of one-half of a contract FTE, or \$40,000 per year.
- Risks. Forrester did not risk-adjust the Pathlock and SAP fees, as these were actual fees charged.

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 organization expects risk-adjusted total costs to be a PV of \$910.413.

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.

Labor	To Implement And Maintain Path	nlock AVM				
REF.	METRIC	CALC./SOURCE	INITIAL	YEAR 1	YEAR 2	YEAR 3
D1	Technical project development — initial setup of AVM platform	Interview	\$300,000	\$0	\$0	\$0
D2	Ongoing labor to maintain Pathlock AVM (third party)	0.5 FTE	\$0	\$40,000	\$40,000	\$40,000
Dt	Labor to implement and maintain Pathlock AVM	D1+D2	\$300,000	\$40,000	\$40,000	\$40,000
	Risk adjustment	0%				
Dtr	Labor to implement and maintain AVM (risk-adjusted)	Pathlock	\$300,000	\$40,000	\$40,000	\$40,000



Pathlock And SAP Fees

According to the *Organization*, it incurred Pathlock and SAP costs in the following categories:

- Pilot. The Organization worked with Pathlock to conduct a brief pilot, where it successfully tested three use cases with live data. As a result, there was a joint decision between IT and the business to continue investing in Pathlock AVM long-term.
- Professional services. Pathlock provided professional services support for implementation and co-development of a library of segregation of duties rules and use cases.
- **Hardware**. The *Organization* was able to leverage existing hardware, so there were no hardware expenses incurred.
- Software license and maintenance. This included SAP fees (connectors).
- **Consulting.** This included Pathlock AVM consulting fees.

Modeling and assumptions. The fees were confirmed by both the *Organization* as well as Pathlock and are represented in the table below.

Risks. Forrester did not risk-adjust the Pathlock and SAP fees, as these were actual fees charged.



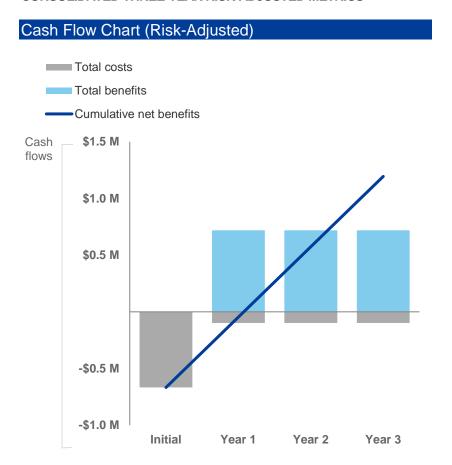
One month Time to complete the pilot and start using Pathlock AVM

Pathloc	ck And SAP Fees					
REF.	METRIC	CALC./SOURCE	INITIAL	YEAR 1	YEAR 2	YEAR 3
E1	Pathlock consulting, services, and maintenance fees	Interview	\$203,000	\$30,000	\$30,000	\$30,000
E2	SAP licenses and maintenance fees (connectors)	Interview	\$164,000	\$27,880	\$27,880	\$27,880
Et	Pathlock and SAP fees	E1 + E2	\$367,000	\$57,880	\$57,880	\$57,880
	Risk adjustment	0%				
Etr	Pathlock and SAP fees (risk-adjusted)		\$367,000	\$57,880	\$57,880	\$57,880



Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS



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.

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	(\$667,000)	(\$97,880)	(\$97,880)	(\$97,880)	(\$960,640)	(\$910,413)
Total benefits	\$0	\$718,250	\$718,250	\$718,250	\$2,154,750	\$1,786,181
Net benefits	(\$667,000)	\$620,370	\$620,370	\$620,370	\$1,194,110	\$875,768
ROI						96%
Payback period						12.9 months

If risk-adjusted costs, benefits, and ROI still demonstrate a compelling business case, it raises confidence that the investment is likely to succeed because the risks that threaten the project have been taken into consideration and quantified. Assuming normal success at mitigating risk, the risk-adjusted numbers should more closely reflect the expected outcome of the investment.



Pathlock Access Violation Management Solution: Overview

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

Financial Impact Of Risk — Access Governance

Quantify your financial exposure from access risk. Prioritize compliance efforts based upon the dollar-value impact of risks across users and business processes.

Oftentimes too much emphasis is placed on the analysis of access risk rather than on a continuous monitoring program for control. When a risk is identified, the focus should be on how to control it in order to reduce the impact to the business. This approach is unique because now you can control and quantify actual risks as opposed to analyzing theoretical/potential issues.

Pathlock Financial Impact Of Risk Solution

A Continuous Monitoring Program Enhances Business Functions

Pathlock is a pioneering leader in integrated risk, financial performance, and regulatory compliance analytics solutions. Pathlock enables organizations to know what users are doing with their access, while at the same time allowing them to focus on monitoring policies and rules rather than just their users. This also allows organizations to quantify actual risks across their enterprise application landscape by measuring the dollar-value impact of risks across users and business processes.

Pathlock provides business stakeholders with visibility into the actual bottom-line or financial impact of risks on the organization. This allows them to move beyond the potential or theoretical risk in order to focus on or prioritize activities based on actual issues affecting the business. With Pathlock, you can:

- Implement Pathlock continuous monitoring program to automate traditional manual activities.
- > Eliminate manual mitigating controls for segregation of duties.
- Move to exception-based monitoring for actual segregation of duties conflicts that occur during transaction processing.
- Quantify your financial exposure from access risk to drive change where the risk may be too great for your appetite.



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.



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.



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.



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



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%.



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

