FORRESTER®

The Total Economic Impact™ Of Thomson Reuters ID Risk Analytics (IDRA)

Cost Savings And Business Benefits
Enabled By ID Risk Analytics (IDRA)

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ABOUT FORRESTER CONSULTING

Forrester provides independent and objective research-based consulting to help leaders deliver key transformation outcomes. Fueled by our customer-obsessed research, Forrester's seasoned consultants partner with leaders to execute on their priorities using a unique engagement model that tailors to diverse needs and ensures lasting impact. For more information, visit forrester.com/consulting.

Executive Summary

With a substantial increase in fraud claims, limited processes for risk management, and overextended resources, unemployment insurance divisions within government agencies need a solution to address risk associated with potential fraudulent claims. The Thomson Reuters ID Risk Analytics solution delivers a risk assessment of claims utilizing identity verification data sets and analytics. The solution decreases the number of dollars lost to fraudulent claims, saves time for fraud investigators, and improves trust in data quality.

According to Forrester research, identity verification technologies allow for formulating and using a risk or confidence score to determine the likelihood that an online subject is who they claim to be; most importantly, these tools and processes reduce the likelihood of identity theft and, consequently, fraud losses.[1] For government agencies, specifically within unemployment insurance departments, the number of submitted claims skyrocketed during the COVID-19 pandemic, as did the number of fraudulent claims. These groups required a solution to manage and categorize potential fraudulent claims.

Thomson Reuters ID Risk Analytics (IDRA) identifies and categorizes potential risk within agency claims using a variety of identity verification data sets (e.g., CLEAR ID Confirm) and analytics to provide risk analysis in a single dashboard.

Thomson Reuters commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying IDRA.[2] The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of IDRA on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed the representative of an organization who has experience using IDRA. For the purposes of this

KEY STATISTICS

Return on investment (ROI)
178%

Net present value (NPV)
$2.61M

study, Forrester used this experience to project a three-year financial analysis.

Prior to using IDRA, the interviewee noted that their organization had an internal claims management system and team members used a spreadsheet to manage fraud claims. The influx of claims during the COVID-19 pandemic overwhelmed the team and made clear that their process could not handle the high number of claims.

After the investment in IDRA, the number of dollars lost to fraudulent claims decreased and fraud investigators saved time with data analysis. Additionally, a simpler process for analyzing claims led to an improved employee experience and greater trust in the data.

KEY FINDINGS

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

- **Decrease in dollars lost to fraudulent claims.** Due to an immense number of claims and a constrained internal process, millions of dollars were lost to potential fraudulent claims. With IDRA and its analytics system to categorize risk, the representative organization has decreased the number of fraudulent claims paid out annually. For the interviewee's organization, this adds up to a three-year benefit of $3.6 million.

- **Productivity improvement for fraud investigators.** Fraud investigators at the interviewee's organization used to spend hours conducting data analysis. Upon implementing IDRA, which uses information from across databases and proprietary analytics to conduct risk analysis, fraud investigators save nine hours a week, equating to 480 hours annually on claims analysis. For the representative organization, IDRA enabled fraud investigator productivity savings of $466,000 over three years.

Time saved weekly per fraud investigator

9 hours

Unquantified benefits. Benefits that are not quantified in this study include:

- **Greater trust in data quality.** With a singular solution that collects information from across databases and verifies the data, employees gain

> **"We knew that we were looking at a changed landscape in terms of fraud. … IDRA specifically was actually a driving force for selection because of the way it's structured and the way we can choose the alerts, and we can modify the alerts as things change."**
>
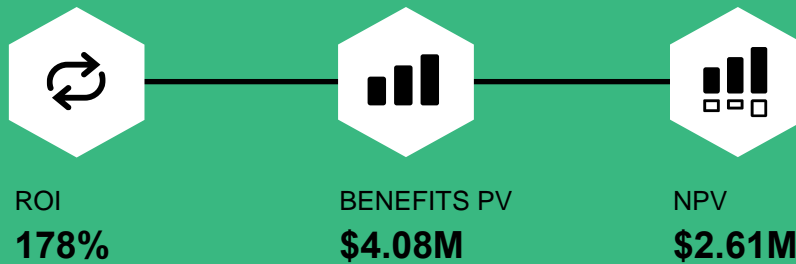> *Criminal investigator, state government unemployment insurance division*

greater trust in the data available to verify claims information.

- **Improved employee experience.** With a simpler and more efficient process to manage potentially fraudulent claims, resulting in less manual work, employees gain an improved working experience.

Costs. Three-year, risk-adjusted PV costs include:

- **Batch analysis and subscription fees.** The interviewee's organization receives an initial, one-time report with a risk analysis on the backlog of claims and pays an annual subscription fee, adding up to $1.2 million.

- **Implementation and ongoing agency costs.** Implementation tasks to set up the IDRA system and ongoing tasks for updating data and report creation add up to $224,000 over three years.

The interview and financial analysis found that the representative's organization experiences benefits of $4.08 million over three years versus costs of $1.47 million, adding up to a net present value (NPV) of $2.61 million and an ROI of 178%.

ROI
178%

BENEFITS PV
$4.08M

NPV
$2.61M

Benefits (Three-Year)

Fraud loss cost avoidance — $3.6M

Improved productivity for fraud investigators — $466.3K
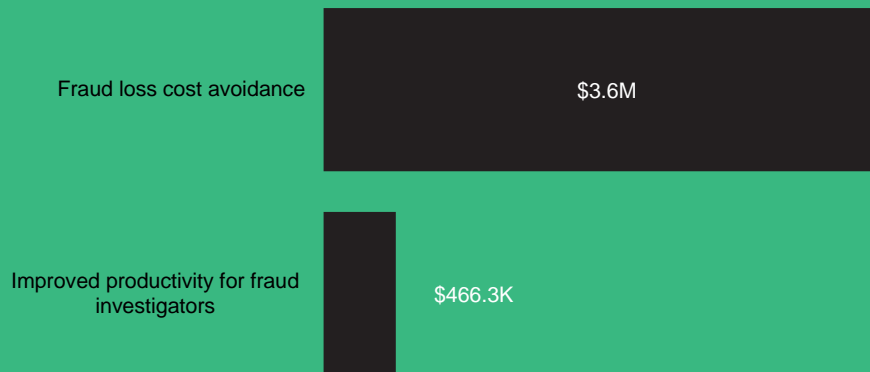
"IDRA gives us a good visual of what we're looking at for our system as a whole for fraud. We felt like we were just treading water and had been trying desperately to identify everything. This gives us a beacon — a place to start."

— Criminal investigator, state government unemployment insurance division

TEI FRAMEWORK AND METHODOLOGY

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

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 IDRA can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Thomson Reuters 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 IDRA.

Thomson Reuters 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.

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

DUE DILIGENCE
Interviewed Thomson Reuters stakeholders and Forrester analyst to gather data relative to IDRA.

INTERVIEW
Interviewed the representative of an organization using IDRA 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 interviewee.

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.

INTERVIEWEE'S ORGANIZATION

Forrester interviewed a criminal investigator in the benefit payment control (BPC) division of the unemployment insurance group within a state government agency. The organization has used the IDRA solution for a period between six months and a year. The organization has the following characteristics:

- The state budget is between $75 million and $150 million for the unemployment insurance division.

- The total number of employees is 800 within the unemployment insurance division, with 14 fraud investigators within the BPC division.

- The division uses an in-house administrative and case management system.

"Initially — prior to getting [IDRA] — we were on our own in terms of determining what we were seeing as investigators [and] in terms of fraudulent activity."

Criminal investigator, state government unemployment insurance division

KEY CHALLENGES

Prior to investment in IDRA, the interviewee's organization used spreadsheets, had limited processes in place to find fraud cases, and had no process for risk categorization. The in-house solution to manage potentially fraudulent claims could not scale to meet demands.

The interviewee noted how the organization struggled with common challenges, including:

- **A limited, inaccurate, and manual process for risk management.** Prior to the COVID-19 pandemic, the unemployment insurance division had a limited number of fraud cases in a year (approximately 100 per year). The internal case management system had limited capabilities to quickly process cases. Team members used a manual process to conduct identity verification. Periodically (once a month or so), the team ran a report to assess fraudulent activity and then updated a spreadsheet with the results. There was no risk management program in place. With the onset of the pandemic, the number of fraud cases increased exponentially, leading to a backlog of nearly 800,000 claims; the legacy spreadsheet system was not equipped to process so many cases.

- **Limited resources.** On the administration side, the BPC unit would conduct audits on claims. If a claimant had fraudulently collected more than a set amount, the case would be flagged and referred to the BPC team to conduct a separate and complete investigation of the case. If required, the case would be referred to a local district attorney. The interviewee noted that the teams could not manage the increase in claims, saying, "We just knew with as small as our team was and stretched as we were then, we needed something more automated."

SOLUTION REQUIREMENTS/INVESTMENT OBJECTIVES

The interviewee's organization searched for a solution that could meet the following requirements and objectives:

- Automated risk management system to identify and categorize fraudulent claims.

- Fully cloud-based platform.

- Modern system with upgradable and customizable capabilities.

- Ability to use funds provided by the US Department of Labor.

USE CASE DESCRIPTION

The primary use case, the interviewee explained, required an automated risk management tool that could assist in processing the immense number of claims. She said, "We [wanted to] utilize those [federal] funds in seeking out a tool that would assist us in identifying, categorizing these fraudulent claims and giving us kind of a point to work from … that was our driving factor."

For this use case, Forrester has modeled benefits and costs over three years.

"We really didn't have a fraud detection program like IDRA, or anything to categorize fraud like IDRA, prior to the pandemic. We were just going through and trying to lock down all these claims before they pay out large sums of money."

Criminal investigator, state government unemployment insurance division

KEY ASSUMPTIONS
- **State budget between $75 million and $150 million**
- **14 fraud investigators**

Analysis Of Benefits

Quantified benefit data

	Total Benefits					
Ref.	**Benefit**	**Year 1**	**Year 2**	**Year 3**	**Total**	**Present Value**
Atr	Fraud loss cost avoidance	$2,520,000	$840,000	$840,000	$4,200,000	$3,616,228
Btr	Improved productivity for fraud investigators	$187,488	$187,488	$187,488	$562,464	$466,255
	Total benefits (risk-adjusted)	$2,707,488	$1,027,488	$1,027,488	$4,762,464	$4,082,483

FRAUD LOSS COST AVOIDANCE

Evidence and data. Before implementing IDRA and prior to the COVID-19 pandemic, given the few fraud cases (fewer than 100 annually), the unemployment insurance division had a minimal process in place for fraud detection. The division ran a report for fraud maybe once a month and the benefits control unit updated a spreadsheet with the cases flagged for fraud. During the COVID-19 pandemic, there was an exponential rise in unemployment insurance claims. The division, with limited staff and a push to pay out claims quickly, conducted limited fraud checks so as to move through the backlog of claims totaling millions of dollars.

After implementing IDRA, the team enjoyed a new and more robust system for risk analysis and fraud management. Every week, new claims data is sent to Thomson Reuters to update the IDRA system. Although the average number of new claims has decreased from the peaks of the pandemic, the number of claims remain higher than pre-pandemic numbers. The IDRA system analyzes and prioritizes claims based on criteria set by the division as well as a flag amount for potentially fraudulent claims. It cross-checks information from CLEAR ID Confirm and other data sets to automatically categorize claims into low, medium, and high categories. The categorized data allowed the agency to pause and stop claims that required further investigation, which

led to fewer fraudulent claims paid out by the unemployment insurance division.

- The interviewee estimated approximately 1,500 total claims a month after the COVID-19 pandemic, with 10% to 20% being potentially fraudulent claims.

- The amount flagged for potential fraud by the administrative team at the unemployment insurance division of this government agency is $7,500.

Modeling and assumptions. For the composite organization, Forrester assumes the following to quantify this benefit:

- To account for the backlog of claims from the COVID-19 pandemic, the number of claims flagged for fraud investigation is higher in Year 1, at 6,000 claims flagged for investigation. For Years 2 and 3, the number of claims flagged for fraud investigation is 2,000 per year.

- The flagged dollar amount set for a fraud claim within the system is $7,500.

- IDRA is credited with pausing or stopping 7% of fraudulent claims.

Risks. The magnitude of this benefit may vary based on:

- Number of unemployment insurance claims per year including backlog of claims.

- The flag amount for a potentially fraudulent claim.

- Fraud cost avoidance attributable to the IDRA system.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $3.6 million.

Fraud Loss Cost Avoidance					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
A1	Number of unemployment insurance claims flagged for fraud investigation by the benefit payment control unit	Interview	6,000	2,000	2,000
A2	Flag for fraud amount on an unemployment insurance claim	Interview	$7,500	$7,500	$7,500
A3	Fraud loss cost avoidance attributable to IDRA	Interview	7%	7%	7%
At	Fraud loss cost avoidance	A1*A2*A3	$3,150,000	$1,050,000	$1,050,000
	Risk adjustment	↓20%			
Atr	Fraud loss cost avoidance (risk-adjusted)		$2,520,000	$840,000	$840,000
	Three-year total: $4,200,000		**Three-year present value: $3,616,228**		

IMPROVED PRODUCTIVITY FOR FRAUD INVESTIGATORS

Evidence and data. Before implementing IDRA, once claims were referred from the benefits control unit, criminal investigators would investigate potentially fraudulent claims, conducting time-consuming, labor-intensive analysis. As part of the analysis, investigators would review information across different public-sector databases such as incarceration databases and social security and death master files. For example, team members working on incarceration cases had to reach out to prisons to verify the incarceration data from the Equifax Workforce Solutions database via email, fax, or phone calls. The COVID-19 pandemic brought a multitude of claims, and criminal investigators had to spend more time conducting the initial investigation into each potential fraud claim.

The IDRA system gave fraud investigators in the investigations and criminal enforcement unit a more efficient process for claims investigations and data analysis. The IDRA system is updated weekly with new claims, and IDRA's system integrates and cross-checks data across a variety of databases using CLEAR ID Confirm, access to which is included with IDRA. According to the interviewed criminal investigator, this data is presented in a single solution with an intuitive user interface on the system dashboard. Potentially fraudulent claims are automatically flagged via the system, so much of the initial data analysis performed has already been conducted. Thus, teams within the investigations and criminal enforcement unit save time and can work on additional priority tasks for flagged claims. According to the interviewee, that team employs 14 fraud investigators.

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

- Fourteen fraud investigators.

- The average hourly salary for a fraud investigator, including base salary, benefits, and pensions, is $31.

- Each fraud investigator annually saves 23% of their time on data analysis.

Risks. The magnitude of this benefit may vary based on:

- The size of the organization.

- Salaries, which may vary based on geographic region and role.

- Productivity improvement for fraud investigators.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of $466,000.

Improved Productivity For Fraud Investigators					
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Number of fraud investigators	Interview	14	14	14
B2	Average hourly fully loaded salary per fraud investigator	Forrester standard	$31	$31	$31
B3	Hours saved annually per fraud investigator	Interview	480	480	480
Bt	Improved productivity for fraud investigators	B1*B2*B3	$208,320	$208,320	$208,320
	Risk adjustment	↓10%			
Btr	Improved productivity for fraud investigators (risk-adjusted)		$187,488	$187,488	$187,488
Three-year total: $562,464			**Three-year present value: $466,255**		

UNQUANTIFIED BENEFITS

The interviewee mentioned the following additional benefits that their organization experienced but was not able to quantify:

- **Greater trust in data quality.** The interviewee described how the teams working on fraud investigations had greater confidence in the data. IDRA uses data from across a variety of databases such as CLEAR ID Confirm to validate claims information and verify identity. The interviewee explained that the team saw fewer false positives because the IDRA system categorizes the data into high, medium, and low, resulting in the team having cleaner data at its disposal, compared to the data produced via manual processes with the legacy system. The interviewee elaborated on improved confidence in the data because of this. "There is greater trust [in the data] because it's coming from trusted sources," she said.

- **Improved employee experience**. The interviewee described how the teams working with fraud cases had a more efficient and simpler experience working through cases because of IDRA. The interviewee said: "Because our process was just 100% manual, you [would] do a

lot of [work] trying to connect the dots. It was a really cognitively heavy load … [now we have an] absolutely [better experience]."

FLEXIBILITY

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

- **Data-mining capabilities.** The interviewee described the option of working with the data available through IDRA and applying the findings to different types of cases: "[IDRA has provided] more flexibility. I think IDRA really gives us that ability to data mine …. I'm excited to see that down the road."

- **Accelerating processes for cases going to prosecution.** The interviewee said that the data available in IDRA could be used to support cases that go to prosecution: "What I would like to see for our team — and I know other folks [would] like to see that as well — we have investigators who specialize in incarceration cases that need to go to prosecution [who] specialize in working on while collecting [cases] to folks who specialize in ID theft [cases]. What I'm most excited about [is

to] get these cases moving that maybe we
wouldn't have been able to do before."

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

Analysis Of Costs

Quantified cost data

Total Costs

Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Ctr	IDRA batch analysis and subscription cost	$1,052,700	$77,000	$77,000	$77,000	$1,283,700	$1,244,188
Dtr	Agency implementation costs	$203,632	$0	$0	$0	$203,632	$203,632
Etr	Agency labor costs	$0	$8,184	$8,184	$8,184	$24,552	$20,352
	Total costs (risk-adjusted)	$1,256,332	$85,184	$85,184	$85,184	$1,511,884	$1,468,172

IDRA BATCH ANALYSIS AND SUBSCRIPTION COST

Evidence and data. Prior to implementing the IDRA solution, the organization received a one-time batch analysis on the backlog of prior claims, presented as a risk analysis report. The large backlog of claims accrued during the COVID-19 pandemic. Once the IDRA system was implemented, the organization also paid an annual subscription fee.

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

- A one-time fee for a batch analysis of the backlog of claims, which stems from the COVID-19 pandemic period.

- The annual subscription fee for IDRA is $70,000.

Risks. These costs may vary based on:

- The batch size for the one-time report.

- The annual subscription fees.

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 $1.2 million.

IDRA Batch Analysis And Subscription Cost

Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
C1	One-time batch analysis cost	Interview	$957,000			
C2	Annual IDRA subscription cost	Interview		$70,000	$70,000	$70,000
Ct	IDRA batch analysis and subscription cost	C1+C2	$957,000	$70,000	$70,000	$70,000
	Risk adjustment	↑10%				
Ctr	IDRA batch analysis and subscription cost (risk-adjusted)		$1,052,700	$77,000	$77,000	$77,000
	Three-year total: $1,283,700			Three-year present value: $1,244,188		

AGENCY IMPLEMENTATION COSTS

Evidence and data. The interviewee described a six-month implementation period with up to five employees on the project team, which included team members from the BPC team as well as IT resources.

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

- Two fraud investigators and two IT resources working on the implementation process.

- The average hourly fully loaded salary for an IT resource is $58.

- The average hourly salary for a fraud investigator, including base salary, benefits, and pensions, is $31.

- Six months to complete the implementation.

Risks. This cost may vary based on:

- The size of the organization.

- Salaries, which may vary based on geographic region and role.

- Implementation time due to integration complexity.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of $204,000.

Agency Implementation Costs						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
D1	Number of IT resources	Interview	2			
D2	Average hourly fully loaded salary for IT resource	Forrester standard	$58			
D3	Number of fraud investigators	Interview	2			
D4	Average hourly fully loaded salary per fraud investigator	Forrester standard	$31			
D5	Time required for implementation (hours)	Interview	1,040			
Dt	Agency implementation costs	((D1*D2)+(D3*D4))*D5	$185,120	$0	$0	$0
	Risk adjustment	↑10%				
Dtr	Agency implementation costs (risk-adjusted)		$203,632	$0	$0	$0
Three-year total: $203,632			**Three-year present value: $203,632**			

AGENCY LABOR COSTS

Evidence and data. The interviewee described the process of updating the data within the IDRA system on a weekly basis. As the product owner, the interviewee would collect new claims data each week and send the new weekly claims data to Thomson Reuters to be entered into the system, which would be updated within several days. The interviewee would also review the data and create reports to be sent out to other groups within the division.

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

- Fraud investigators spend 240 hours annually to update claims data and create reports.

- The average hourly salary for a fraud investigator, including base salary, benefits, and pensions, is $31.

Risks. This cost may vary based on:

- Time required for collecting and updating claims data and report creation.

- Salaries, which may vary based on geographic region and role.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of $20,000.

	Agency Labor Costs						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
E1	Fraud investigator hours for ongoing work	Interview		240	240	240
E2	Average hourly fully loaded salary for fraud investigator	Forrester standard		$31	$31	$31
Et	Agency labor costs	E1*E2	$0	$7,440	$7,440	$7,440
	Risk adjustment	↑10%				
Etr	Agency labor costs (risk-adjusted)		$0	$8,184	$8,184	$8,184
	Three-year total: $24,552			**Three-year present value: $20,352**		

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)
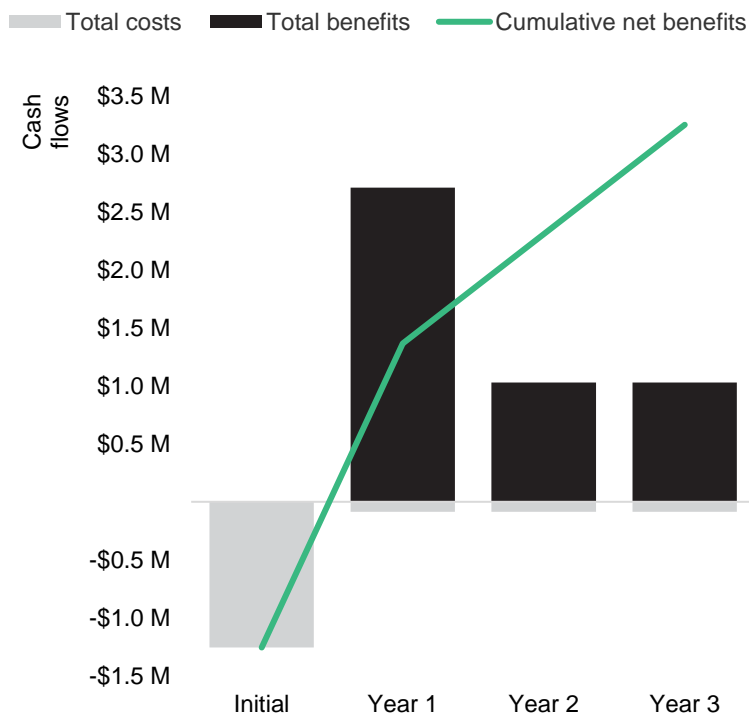
The financial results calculated in the Benefits and Costs sections can be used to determine the ROI and NPV organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI and NPV 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	($1,256,332)	($85,184)	($85,184)	($85,184)	($1,511,884)	($1,468,172)
Total benefits	$0	$2,707,488	$1,027,488	$1,027,488	$4,762,464	$4,082,483
Net benefits	($1,256,332)	$2,622,304	$942,304	$942,304	$3,250,580	$2,614,311
ROI						178%

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%.

Appendix B: Endnotes

[1] Source: "The Identity Verification (IDV) Landscape, Q3 2022," Forrester Research. Inc., September 6, 2022.

[2] 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.

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