A Forrester Total Economic Impact™ Study Prepared For Discoverture

The Total Economic Impact Of Discoverture's Policy Administration Implementation Solutions For Insurance Companies

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Executive Summary

In February 2011, Discoverture commissioned Forrester Consulting to examine the total economic impact and potential value that organizations may realize by utilizing Discoverture's policy administration implementation solutions.

Discoverture is an insurance industry-focused information technology solution and service provider headquartered in Phoenix, Arizona. Founded in 2002, Discoverture currently serves global markets with offices in the US, UK, and India.

This study highlights the benefits and costs of Discoverture's policy administration implementation solutions that an *Organization* conveyed in interviews with Forrester. This *Organization* is a US-based insurance company that serves clients and their customers, offering specialty lines of coverage through general and independent agents throughout the United States. This *Organization* has requested to remain anonymous.

In this study, Forrester provides commentary on the *Organization*'s use of Discoverture's solutions to implement a best-in-breed, web-based policy administration system and quantifies the benefits and ROI that the *Organization* has experienced and will experience over a four-year period.

This study found that for the *Organization*, Discoverture's policy administration implementation solutions has provided risk-adjusted net labor savings of \$1,062,220, and a positive 43% ROI over the past four years.

The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of using Discoverture's policy administration implementation solutions in their organizations.

Discoverture's Policy Administration Implementation Solutions

Our interviews and subsequent financial analysis found that the *Organization* experienced the risk-adjusted ROI, payback period, costs, and benefits shown in Table 1.

Table 1The *Organization* — Four-Year Risk-Adjusted ROI, Payback Period, Costs, And Benefits

Risk-adjusted	Payback	Total benefits	Total costs	Net present
ROI	period	(PV)	(PV)	value
43%	Four months	\$3,560,693	\$2,498,473	

Source: Forrester Research, Inc.

The four-year risk-adjusted total net present value (NPV) of \$1,062,220 represents the net costs and benefits attributed to using Discoverture's policy administration implementation solutions versus self-implementation (see details below in the Costs, Benefits, Flexibility, and Risk sections). In addition, the *Organization*'s risk-adjusted benefits (PV) were

\$3,560,693, and the payback period was within **four months**. Forrester assumes a yearly PV discount rate of 12% for this analysis.

From the customer interview process, Forrester also identified several significant *unquantified* business benefits attributed to Discoverture's policy administration implementation solutions, and these are listed in the Benefits section of this study.

If risk-adjusted costs and benefits 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.

The objective of this study is to identify and quantify the overall costs and benefits experienced by the *Organization*. These results can be used as a guide to allow other organizations to determine the appropriate benefits for their particular environments.

Disclosures

The reader should be aware of the following:

- The study is commissioned by Discoverture and delivered by the Forrester Consulting group.
- Forrester makes no assumptions as to the potential return on investment that other organizations will receive.
 Forrester strongly advises that readers should use their own estimates within the framework provided in the study to determine the appropriateness of an investment in Discoverture's policy administration implementation solutions.
- Discoverture reviewed and provided feedback to Forrester, but Forrester maintained editorial control over the study and its findings and did not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.
- The customer's name for the interview was provided by Discoverture; however Discoverture did not participate in the interview process.

TEI Framework And Methodology

Introduction

From the information provided in the interviews, Forrester has constructed a Total Economic Impact[™] (TEI) framework for those organizations considering using Discoverture's policy administration implementation solutions. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

Most monetary values shown in this study are rounded to the nearest dollar for simplicity of presentation. Actual financial calculations might be based on figures carried to more decimal points than shown here and therefore may not entirely match the resultant figures presented in the tables.

Approach And Methodology

Forrester took a multistep approach to evaluate the impact of Discoverture's policy administration implementation solutions on the *Organization*. Specifically, we:

- Interviewed Discoverture marketing, sales, and product management personnel to gather data relative to Discoverture's policy administration implementation solutions.
- Interviewed the *Organization*'s vice president of application development to obtain data with respect to costs, benefits, flexibility options, and risks.
- Constructed a financial model representative of the interviews using the TEI methodology. The financial model is populated with the cost and benefit data obtained from the customer interviews.

Forrester employed four fundamental elements of TEI in modeling Discoverture's policy administration implementation solutions:

- 1. Costs.
- 2. Benefits to the organization.
- 3. Strategic flexibility options.
- Risk.

Given the increasing sophistication that enterprises have regarding value-based analyses related to technology investments, Forrester's TEI methodology serves the purpose of providing a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

About Discoverture's Policy Administration Implementation Solutions: Overview

Discoverture is an insurance industry-focused information technology solution and service provider headquartered in Phoenix, Arizona. Founded in 2002, Discoverture currently serves global markets with offices in the US, UK, and India. Discoverture's insurance technology professionals combine a thorough understanding of business processes with industry best practices to execute value-added technology solutions for its clients.

According to Discoverture, its policy administration and rating systems implementation solutions allow quicker product definition, distribution, and transaction processing capabilities, providing significant business benefits and a high ROI.

The solution increases revenues, reduces expenses, and gives a competitive advantage in the marketplace. It also improves the overall efficiency of the insurers and agents by reducing the level of human involvement for routine tasks that result in delays and errors. With web-enabled clients, service-oriented architecture, customizable workflows, and rules-based XML datasets, the new generation of policy administration systems create a robust platform for sustained profitable growth.

Discoverture specializes in implementing new-generation policy administration and rating systems that can handle both personal and commercial lines of business. In addition to Discoverture's experience, business knowledge and technical expertise, they also partner with leading-edge innovative software vendors to bring insurance companies the solutions that meet their specific needs. Discoverture's extensive insurance knowledge, both carrier specific and ISO (a leading source of information about property/casualty insurance risk), assures that they can implement policy administration and rating systems solutions quickly and effectively.

Analysis

About The Organization

The *Organization*, which has requested anonymity, is a US-based insurance company that offers specialty lines of coverage through general and independent agents throughout the United States. In 2005, the *Organization* came to the conclusion that its existing policy administration mainframe system was outdated and would continue to require extensive and burdensome ongoing support. To compete in the marketplace with specialty product lines of insurance such as mobile homes, homeowners, and dwellings, it needed to acquire a best-in-breed, web-based policy administration system that was customizable both across its specialty product lines and the 50 states where it conducted business.

In 2005, the *Organization* purchased and attempted to implement a third-party best-of-breed policy administration application across its business. The first attempt used in-house resources, and a subsequent endeavor used a third-party service company; both attempts yielded disappointing results supported by significant negative business stakeholder feedback. In 2007, the *Organization* brought in Discoverture to help restart the implementation.

Interview Highlights

For purposes of this study, Forrester conducted extensive interviews with the *Organization*'s vice president of application development. The *Organization* has been associated with Discoverture since 2007, which continues today to help the *Organization* implement its best-of-breed policy administration system for multiple lines of business and across 50 states.

Costs

Discoverture's Policy Administration Implementation Solution Costs

The *Organization* began its association with Discoverture in 2007, with Discoverture providing application development services in a global service delivery model on an ongoing basis as the *Organization* rolled out various insurance products across 46 states using the new best-of-breed policy administration system. Table 2 reflects the following costs:

- In 2007 and 2008, Discoverture provided the following full-time resources to the Organization:
 - O Two on-site and five offshore developers at a blended hourly rate of \$33.75 for a monthly cost of \$41,000 (\$492,000 annually).
 - One on-site and four offshore QA testers at a blended hourly rate of \$26 for a monthly cost of \$24,000 (\$288,000 annually).
- In 2009 and 2010, Discoverture provided the following full-time resources to the *Organization*:
 - Two on-site and six offshore developers at a blended hourly rate of \$33.75 for a monthly cost of \$43,000 (\$516,000 annually).
 - One on-site and six offshore QA testers at a blended hourly rate of \$26 for a monthly cost of \$30,000 (\$360,000 annually).

Discoverture's blended hourly rates are discounted based on a long-term resource commitment by the *Organization*, as well as a higher volume of Discoverture-provided resources for additional projects not included in this study. Other organizations may not achieve the same discounted hourly rates.

Table 2The *Organization* — Total Costs Paid To Discoverture For Policy Administration Implementation

Costs	2007	2008	2009	2010	Total	PV
Developers	\$492,000	\$492,000	\$516,000	\$516,000	\$2,016,000	\$1,526.711
QA Testers	\$288,000	\$288,000	\$360,000	\$360,000	\$1,296,000	\$971,762
Total Costs	\$780,000	\$ 780,000	\$876,000	\$ 876,000	\$ 3,312,000	\$ 2,498,473

Source: Forrester Research, Inc.

Note: Discoverture provides two shadow resources for development and one shadow resource for QA testing that it does not charge the *Organization* for. These resources work full-time on the *Organization*'s policy administration project and are there to backfill for vacations, attrition, or short-term work ramp-ups.

"If we did not implement a best-in-breed policy administration system we could not have grown the business from \$250 million to \$500 million. Discoverture has a pretty deep and experienced bench when it comes to policy

administration systems. They typically set up a couple extra people, what they call shadow resources. So they've got somebody learning the process that I don't pay for. And then if someone were to leave or if I need additional resources Discoverture has people who have followed our processes so they can hit the ground running." (the Organization's vice president of application development)

Benefits

This benefits section details the benefits for the *Organization* attributed to Discoverture's policy administration implementation solutions. At the end of this section, we also included qualitative benefits that the *Organization* experienced but could not quantify.

Labor Cost Avoidance By Using Discoverture's Policy Administration Implementation Solutions

According to the Organization, it experienced significant labor cost savings by using Discoverture to help implement the third-party, best-in-breed policy administration solution. The alternative was to implement the solution in-house (attempted once in 2005) at a much higher housely labor cost for full time appropriate.

(attempted once in 2005) at a much higher hourly labor cost for full-time employees. Although the cost per internal employee is significantly higher, the *Organization* believes that it would have implemented the solution internally with fewer FTE resources than they are paying for at Discoverture. There would have been two fewer developers and one fewer QA tester across the four years of our analysis. The *Organization* would expect to pay internal developers at a fully loaded cost of \$75 to \$79 per hour and QA Testers at a fully loaded cost of \$53 per hour. Below are the labor costs (cost avoidance savings in our analysis) if the *Organization* had implemented the policy administration system in-house over the past four years:

- In 2007 and 2008, the *Organization* would have needed the following full-time employee resources:
 - o Five developers (on-site employees) at a fully loaded hourly rate of \$79 for a monthly cost avoidance savings of \$63,200 (\$758,400 annually).
 - Four QA testers (on-site employees) at a fully loaded hourly rate of \$53 for a monthly cost avoidance savings of \$33,920 (\$407,040 annually).
- In 2009 and 2010, the *Organization* would have needed the following full-time employee resources:
 - o Six developers (on-site employees) at a fully loaded hourly rate of \$75 for a monthly cost avoidance savings of \$72,000 (\$864,000 annually).
 - O Six QA testers (on-site employees) at a fully loaded hourly rate of \$53 for a monthly cost avoidance savings of \$50,880 (\$610,560 annually).

Table 3 outlines four years' worth of labor cost avoidance savings.

Table 3The *Organization* — Labor Cost Avoidance Savings (Non-Risk-Adjusted)

Cost avoidance savings	2007	2008	2009	2010	Total	PV
Developers	\$758,400	\$758,400	\$864,000	\$864,000	\$3,244,800	\$2,445,800
QA Testers	\$407,040	\$407,040	\$610,560	\$610,560	\$2,035,200	\$1,510,525
Total cost avoidance savings	\$1,165,440	\$1,165,440	\$1,474,560	\$1,474,560	\$5,280,000	\$3,956,325

Source: Forrester Research, Inc.

Table 4 calculates the net labor savings by taking the cost avoidance savings from Table 3 and subtracting the actual Discoverture labor costs in Table 2.

Table 4The *Organization* — Net Labor Savings (Non-Risk-Adjusted)

Cost avoidance savings	2007	2008	2009	2010	Total	PV
Developers	\$266,400	\$266,400	\$348,000	\$348,000	\$1,228,800	\$919,089
QA Testers	\$119,040	\$119,040	\$250,560	\$250,560	\$739,200	\$538,763
Total net labor savings	\$385,440	\$385,440	\$598,560	\$598,560	\$1,968,000	\$1,457,852

Source: Forrester Research, Inc.

Unquantified Benefits

The *Organization* highlighted the following additional features and benefits of Discoverture's policy administration implementation solutions that it was unable to quantify. Such benefits are potentially valuable and should be taken into consideration when analyzing the total ROI realized by using Discoverture's policy administration implementation solutions:

• Faster time-to-market — revenue. According to the *Organization*, it could not have grown its specialty insurance business from \$250 million to \$500 million over five years without acquiring a best-in-breed, webbased policy administration system. Discoverture is in the process of helping the *Organization* implement more than 300 lines of business across 50 states. Using Discoverture allows the *Organization* to implement

each line of business in half the time it would take the *Organization* to do it themselves. For example, Discoverture can implement a line of business in one state in five to nine days, including development, testing, getting it ready for user acceptance, concluding user acceptance, and bringing it online. In contrast, it would take the *Organization* 15 to 20 days to bring up that same line of business, causing it to miss about 10 days of startup revenue. The *Organization* attributes this faster time-to-market to Discoverture's expertise in both the insurance business and implementing best-in-breed, web-based policy administration systems.

- Faster time-to-market cost. The *Organization* is currently paying Discoverture \$876,000 per year to help implement more than 300 lines of business across 50 states. Discoverture allows the *Organization* to implement each line of business in half the time it would take the *Organization* to do it themselves; therefore, full implementation will take less time, allowing the *Organization* to stop paying for Discoverture services earlier.
- Sunsetting legacy application. The *Organization* stated that once it has all 300 lines of business across 50 states up and running, and all of its policies have renewed off the old mainframe system, it will be able to sunset that legacy application. According to the *Organization*'s vice president of application development, "It's hard to quantify the benefits of retiring the mainframe system, but it's a big number."

"One of the things we've been able to do with Discoverture is implement additional capabilities outside of the best-in-breed policy administration system. Discoverture has been very helpful in that area, for example, adding book roll capability, applicant credit scores, capacity limits and moratorium; as these features are not included in the base system. We've been able to take advantage of Discoverture's deep insurance industry expertise to help us design and build that additional functionality." (the Organization's vice president of application development)

Flexibility Options

Flexibility, as defined by TEI, represents investing in additional capacity or agility that can be turned into business benefit for some future additional investment. For rester and the *Organization* believe that investing in Discoverture's policy administration implementation solutions lays the groundwork to take advantage of the following flexibility options:

- **Discoverture's use of shadow resources.** The *Organization* does not have to worry about staff attrition or vacation coverage because Discoverture assigns two shadow resources for development and one shadow resource for QA to the project. These are essentially free resources to the *Organization*, and if you add their labor hours, the blended hourly rate that Discoverture charges the *Organization* comes down even further.
- **Discoverture's deep insurance industry experience.** The *Organization* plans to use Discoverture to implement a new and large agriculture insurance product in the future. Discoverture will already understand the *Organization*'s business and be able to reuse the same commercial templates from the existing, flexible, best-in-breed policy administration system. The *Organization*'s alternative is to implement this new agriculture product themselves, which would involve hiring a team of employees or contractors that collectively have three distinct, hard-to-find skills: 1) insurance; 2) agriculture; and 3) experience with the best-in-breed policy administration system. Assuming that the *Organization* could hire the appropriate team, it would only have a short-term need for these resources.

The *Organization* indicated that its investment in Discoverture's policy administration implementation solutions will provide it with the opportunity to take advantage of the above flexibility options. The *Organization*, however, was not able to quantify these benefits; therefore, this study will not calculate the value of these flexibility options. Forrester encourages readers to learn more about Discoverture's policy administration implementation solutions to determine the potential quantifiable flexibility option benefits for their organizations.

The value of flexibility is clearly unique to each entity, and the measure of its value varies from organization to organization. For the purpose of this analysis, we have assumed that the *Organization* sees future value in being able to take advantage of the above flexibility options. The value of the flexibility option, when calculated, is based on the Black-Scholes Option Pricing formula. (For information regarding the flexibility calculation, please see Appendix A.)

Risk

Both risk-adjusted and non-risk-adjusted costs and benefits are discussed in this study. The *Organization*'s costs and benefits in tables 2, 3, and 4 are quoted in non-risk-adjusted (best-case) terms and before risk adjustments are made. The assessment of risk provides a range of possible outcomes based on the risks associated with web-related projects in general and specific risks relative to Discoverture's policy administration implementation solutions. In our research, we saw that using Discoverture's policy administration implementation solutions was a low-risk endeavor. To further mitigate risks, Discoverture assigns shadow resources for development and QA. These are essentially free resources to the *Organization*, which does not have to worry about staff attrition or vacation coverage.

Measurement of risk is a way of incorporating the levels of confidence and uncertainty regarding the cost and benefit estimates of a given investment. Higher confidence that the cost and benefit estimates will be met implies that the level of risk is lower and that the variation between the risk-adjusted and non-risk-adjusted outcomes is minimized.

The following general risks were considered in this study:

- Lack of organizational discipline in creating processes and procedures to best take advantage of the benefits.
- The potential that the benefits will not be measured and quantified, and as a result, no TEI benefit would be captured and acknowledged.

The following risks associated with Discoverture's policy administration implementation solutions were considered in this study:

According to the Organization, there are risks inherent when you undertake any technology project, especially
when you are using third-party resources to implement mission-critical systems. Until that third party has a
proven track record, there will always be perceived risks. The Organization recommends that readers do their due
diligence when deciding what external vendors to use. The Organization views Discoverture as an industry
subject matter expert partner that also provides a safety net in the event the Organization needs additional
insurance-experienced resources quickly, reducing its overall risk.

For this study, Forrester applied a 10% risk adjustment (reduction of 10%) to the labor cost avoidance savings in Table 3 to reflect the risks listed above (see Table 5 for risk-adjusted labor cost avoidance savings). We have not risk-adjusted Discoverture's policy administration implementation costs, as these were fixed price quotes from Discoverture.

If a risk-adjusted benefit still demonstrates a compelling business case, it raises confidence that the investment is likely to succeed, as 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 outcome of the investment.

Table 5 calculates the risk-adjusted labor cost avoidance savings by reducing the numbers in Table 3 by 10%.

Table 5The *Organization* — Labor Cost Avoidance Savings (Risk-Adjusted Downward By 10%)

Cost avoidance savings	2007	2008	2009	2010	Total	PV
Developers	\$682,560	\$682,560	\$777,600	\$777,600	\$2,920,320	\$2,201,220
QA Testers	\$366,336	\$366,336	\$549,504	\$549,504	\$1,831,680	\$1,359,472
Total cost avoidance savings	\$1,048,896	\$1,048,896	\$1,327,104	\$1,327,104	\$4,752,000	\$3,560,693

Source: Forrester Research, Inc.

Table 6 calculates the risk-adjusted *net* labor savings by taking the cost avoidance savings from Table 5 and subtracting the actual Discoverture labor costs in Table 2.

Table 6The Organization — Net Labor Savings (Risk-Adjusted)

Cost avoidance savings	2007	2008	2009	2010	Total	PV
Developers	\$190,560	\$190,560	\$261,600	\$261,600	\$904,320	\$674,509
QA Testers	\$78,336	\$78,336	\$189,504	\$189,504	\$535,680	\$387,710
Total net labor savings	\$268,896	\$268,896	\$451,104	\$451,104	\$1,440,000	\$1,062,220

Source: Forrester Research, Inc.

Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

"You know, to me there's a difference between a vendor and a partner and I view Discoverture as a partner. I know their executives. I know their developers. Their onshore people are treated just like full time employees. So a lot of it is relationship building and Discoverture has made it very easy. They have been very flexible. They come in and they talk to our business folks. They talk to the project sponsors. So we've got that comfort level that I wouldn't necessarily have with any other vendor." (the Organization's vice president of application development)

Financial Summary

The financial results calculated in the Costs, Benefits, and Risks sections can be used to determine the risk-adjusted net present value of benefits, ROI, and payback period for the *Organization*'s investment in Discoverture's policy administration implementation solutions. These are shown in Table 7 below.

Table 7The *Organization* - Cash Flow, ROI, And Payback Period (Risk-Adjusted)

	Initial	2007	2008	2009	2010		PV
Costs	0	(\$780,000)	(\$780,000)	(\$876,000)	(\$876,000)	\$3,312,000	\$2,498,473
Benefits	0	\$1,048,896	\$1,048,896	\$1,327,104	\$1,327,104	\$4,752,000	\$3,560,693
Net benefits	0	\$268,896	\$268,896	\$451,104	\$451,104	\$1,440,000	\$1,062,220
ROI	43%						
Payback period	Four months						

Source: Forrester Research, Inc.

Study Conclusions

As the data in this study indicates, Discoverture's policy administration implementation solution has the potential to provide a very good return on investment. In addition, the **risk-adjusted ROI of 43%, along with a payback period of within four months** (breakeven point), raises confidence that the investment is likely to succeed, as the risks that may

threaten the project have already been taken into consideration and quantified. In this study, risks have been modeled conservatively in the hope of showing worst-case expectations.

Insurance companies that are likely to achieve similar benefits outlined in this study have the following characteristics:

- Are mid-tier insurance companies with annual premiums between \$150 million and \$2 billion.
- Have a business need to implement a web-enabled next-generation policy administration system for both commercial and personal lines of business across multiple states.
- Have an IT department with finite resources and an understanding of the complexities of replacing their legacy systems with a new system while at the same time keeping the company running efficiently.
- Are organizations that attempted to implement a best-in-breed policy administration system, only to discover
 that it was significantly more complicated than originally anticipated.
- Are organizations that desire to focus on their insurance business and are willing to outsource IT-related tasks.

For the *Organization*, Discoverture's policy administration implementation solutions produced **a positive 43% risk-adjusted ROI and a quick** — **within four months** — horizon to recoup the investment.

We make no assumptions regarding the effects of Discoverture's policy administration implementation solutions at other organizations. This study examines the potential impact attributable to the Discoverture customer that participated in our examination. The underlying objective of this document is to provide guidance to technology and business decision-makers seeking to identify areas where value can potentially be created by investing in Discoverture's policy administration implementation solutions.

Appendix A: Total Economic Impact™ Overview

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.

The TEI methodology consists of four components to evaluate investment value: benefits, costs, risks, and flexibility.

Benefits

Benefits represent the value delivered to the user organization — IT and/or business units — by the proposed product or project. Often product or project justification exercises focus just on IT cost and cost reduction, leaving little room to analyze the effect of the technology on the entire organization. The TEI methodology and the resulting financial model place 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. Calculation of benefit estimates involves a clear dialogue with the user organization to understand the specific value that is created. In addition, Forrester also requires that there be a clear line of accountability established between the measurement and justification of benefit estimates after the project has been completed. This ensures that benefit estimates tie back directly to the bottom line.

Costs

Costs represent the investment necessary to capture the value, or benefits, of the proposed project. IT or the business units may incur costs in the forms of fully burdened labor, subcontractors, or materials. Costs consider all the investments and expenses necessary to deliver the proposed value. In addition, the cost category within TEI captures any incremental costs over the existing environment for ongoing costs associated with the solution. All costs must be tied to the benefits that are created.

Risk

Risk measures the uncertainty of benefit and cost estimates contained within the investment. Uncertainty is measured in two ways: 1) the likelihood that the cost and benefit estimates will meet the original projections, and 2) the likelihood that the estimates will be measured and tracked over time. TEI applies a probability density function known as "triangular distribution" to the values entered. At a minimum, three values are calculated to estimate the underlying range around each cost and benefit.

Flexibility

Within the TEI methodology, direct benefits represent one part of the investment value. While direct benefits can typically be the primary way to justify a project, Forrester believes that organizations should be able to measure the strategic value of an investment. Flexibility represents the value that can be obtained for some future additional investment building on top of the initial investment already made. For instance, an investment in an enterprisewide upgrade of an office productivity suite can potentially increase standardization (to increase efficiency) and reduce licensing costs. However, an embedded collaboration feature may translate to greater worker productivity if activated.

The collaboration can only be used with additional investment in training at some future point in time. However, having the ability to capture that benefit has a present value that can be estimated. The flexibility component of TEI captures that value.

Appendix B: Glossary

Discount rate: The interest rate used in cash flow analysis to take into account the time value of money. Although the Federal Reserve Bank sets a discount rate, companies often set a discount rate based on their business and investment environment. For rester assumes a yearly discount rate of 12% for this analysis. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult their respective organization to determine the most appropriate discount rate to use in their own environment.

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.

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 net present value of cash flows.

Payback period: The breakeven point for an investment. The point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Return on investment (ROI): A measure of a project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits minus costs) by costs.

A Note On Cash Flow Tables

The following is a note on the cash flow tables used in this study (see the example table below). The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1. Those costs are not discounted. All other cash flows in Years 1 through 3 are discounted using the discount rate (shown in Framework Assumptions section) at the end of the year. Present value (PV) calculations are calculated for each total cost and benefit estimate. Net present value (NPV) calculations are not calculated until the summary tables and are the sum of the initial investment and the discounted cash flows in each year.

Table [Example]

Example Table

Ref.	Category	Calculation	Initial cost	Year 1	Year 2	Year 3	Total

Source: Forrester Research, Inc.

Appendix C: About The Project Director



Bob Cormier
Vice President, Principal Consultant

Bob is a vice president, principal consultant for Forrester's Total Economic Impact service. He is a leading expert on deriving business value from technology investments, specializing in advising clients on the TEI framework — services that help organizations understand the overall financial value of IT strategies and investments. He serves the following client roles:

- Technology vendor sales enablement professionals. Bob works with these professionals in their efforts to clearly articulate the unique value proposition of their solutions to prospects and customers using Forrester's TEI methodology.
- CIOs and their staff. Bob serves as a trusted advisor to create consistent, repeatable, and best-practice processes to justify and add credibility to technology investments business cases using Forrester's TEI methodology.

Bob has authored numerous TEI case studies for Forrester's vendor clients. He has also delivered his acclaimed Justifying Technology Investments (JTI) workshop to more than 800 participants representing 400 organizations.

Bob has more than 25 years experience in the IT and consulting industries. Prior to joining Forrester, he held senior-level positions at two leading eBusiness consulting firms, ZEFER and Cambridge Technology Partners. Bob has successfully led company efforts to optimize financial, operational, and resource planning activities, incorporating leading-edge, professional service automation (PSA) applications and enterprise resource planning (ERP) systems. He has also held senior financial management positions at Digital Equipment and Anixter International.

During his career, Bob has consulted with global users and vendors of IT and has been a frequent speaker at conferences, events, and seminars.

Education

Bob earned an M.B.A. from Bentley University and a B.S. in business from the University of New Hampshire. As an adjunct professor, he has taught finance and economics courses for more than 10 years at Southern New Hampshire University and Daniel Webster College.