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The Total Economic Impact™ Of Red Hat Technical Account Managers

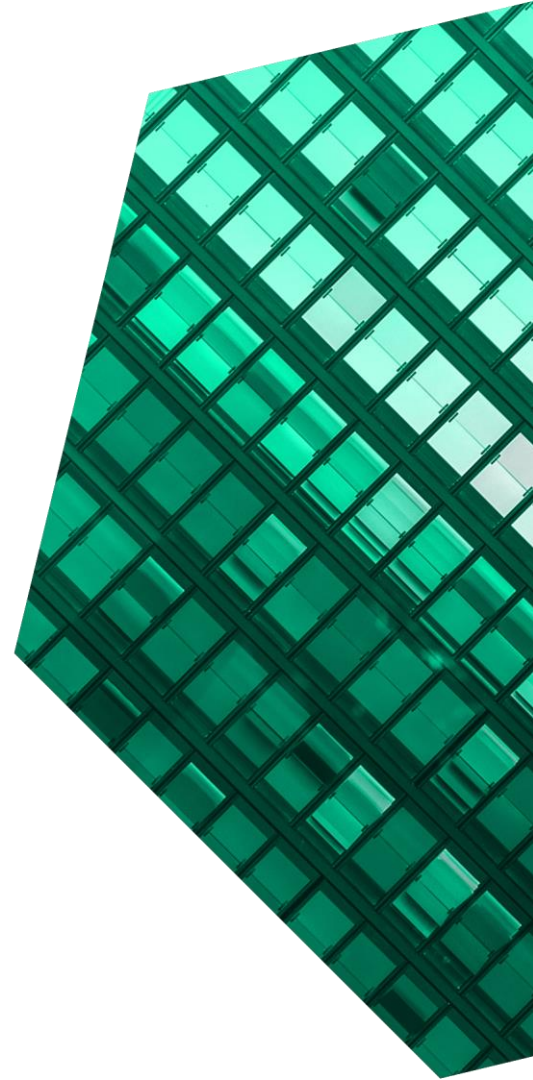
Cost Savings And Business Benefits
Enabled By Technical Account Managers

MARCH 2023

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ABOUT FORRESTER CONSULTING

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Executive Summary

IT and development teams working with Red Hat software are often enabling dramatic changes to modernize their organizations, and their familiarity with new and complex environments and tools may vary across the team. Red Hat Technical Account Managers are seasoned professionals with deep experience in Red Hat software who work side-by-side with customer teams to ensure they get the most out of their Red Hat products while maintaining high levels of security.

A [Red Hat Technical Account Manager](#) provides a single point of contact to help organizations plan and deploy Red Hat software more successfully.

Technical Account Managers (TAMs) specialize in a particular Red Hat software product (e.g., Enterprise Linux, OpenShift, Ansible) and work side by side with customer teams to guide technology strategy, enhance security, and mobilize other Red Hat resources on their behalf.

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

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four representatives with experience using TAMs. For

KEY STATISTICS



Return on investment (ROI)

379%



Net present value (NPV)

\$3.95M

the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single [composite organization](#), which is a global financial services company called Elevate Financial with \$5 billion in annual revenue and 20,000 employees.

Prior to using TAMs, these interviewees noted how their organizations wasted time and resources when they failed to use their Red Hat software most efficiently. This could lead to loss of productivity, nonfunctioning applications, security vulnerabilities, and system outages that could impact customers.

After the investment in TAMs, the interviewees agreed that they were using their Red Hat software more effectively and efficiently. Key results from the investment included faster time to market, reduced outages, and lowered risk of breach.

Reduction in system outage time

67%



KEY FINDINGS

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

- **Improved developer and IT productivity adds \$3.3 million to the composite organization's profitability.** TAMs give Elevate Financial's developers a much clearer line of sight into upcoming changes in Red Hat products that could affect the feasibility or security of the applications they are creating, and they can connect quickly with engineering and other teams at Red Hat when they run into issues.
- **Reduced system outage costs amount to \$1.1 million.** The same guidance that keeps developers from wasting time on solutions that won't work on Red Hat also protects Elevate Financial from the resulting system outages. Enlisting its TAMs in cases where an outage does occur greatly reduces the time to resolution.
- **Lowered technology fees save the composite organization \$433,000.** As the TAMs become more familiar with how Elevate Financial uses Red Hat products, they monitor inefficiencies and suggest alternative working processes and styles that allow the company to work more efficiently and consolidate subscriptions, reducing its overall spend with Red Hat.
- **Enhanced security/compliance deliver over \$167,000 in value.** TAMs provide immediate notice of new security threats, help Elevate Financial troubleshoot issues on third-party software, and collaborate on protecting Elevate from internal and external threats.

Unquantified benefits. Benefits that provide value for the composite organization but are not quantified in this study include:

- **Accelerated knowledge transfer to team.** The TAMs' depth of knowledge about Red Hat products not only saves the team time working on

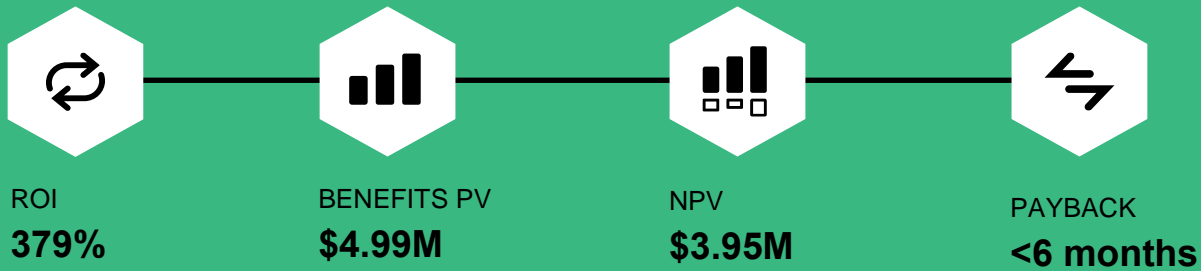
specific projects, but then also becomes institutional knowledge for Elevate.

- **Better solutions from collaborative thinking.** The composite organization's TAMs are always thinking about ways they can use the technology more successfully.

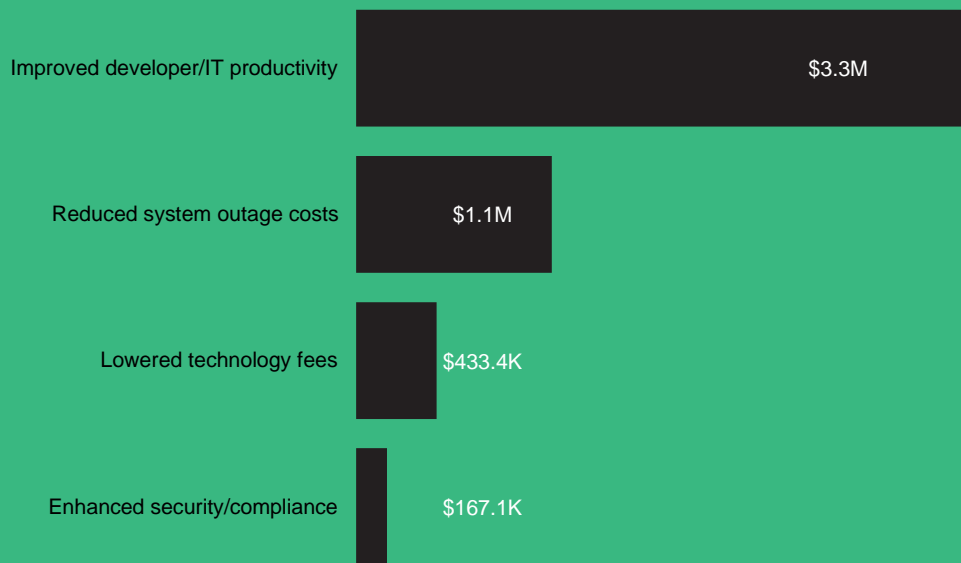
Costs. Three-year, risk-adjusted PV costs for the composite organization include:

- **Red Hat fees for the TAMs' services amount to \$940,000.** Elevate pays Red Hat for the services of three TAMs, one to focus on each of the products it has a subscription for.
- **Ongoing management involves internal team members' time worth just over \$102,000.** Team members spend time meeting with each of the TAMs once a week to keep projects on track and stay on top of emerging Red Hat technology.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$4.99 million over three years versus costs of \$1.04 million, adding up to a net present value (NPV) of \$3.95 million and an ROI of 379%.



Benefits (Three-Year)



“[Our TAM is] a very smart member of my team, a very valuable member of my team. That’s how I view it.”

— Senior manager and infrastructure systems engineer, healthcare

TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in Technical Account Managers.

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 TAMs can have on an organization.

Forrester Consulting conducted an online survey of 351 cybersecurity leaders at global enterprises in the US, the UK, Canada, Germany, and Australia. Survey participants included managers, directors, VPs, and C-level executives who are responsible for cybersecurity decision-making, operations, and reporting. Questions provided to the participants sought to evaluate leaders' cybersecurity strategies and any breaches that have occurred within their organizations. Respondents opted into the survey via a third-party research panel, which fielded the survey on behalf of Forrester in November 2020.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Red Hat 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 TAMs.

Red Hat 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.

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



DUE DILIGENCE

Interviewed Red Hat stakeholders and Forrester analysts to gather data relative to TAMs.



INTERVIEWS

Interviewed four representatives at organizations using a Red Hat TAM to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewees' organizations.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewees.



CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The Red Hat Technical Account Managers Customer Journey

■ Drivers leading to the Technical Account Managers investment

Interviews			
Role	Industry	Region	Revenue
Application architect	Financial services	EMEA	\$2.7 billion
Senior manager and infrastructure systems engineer	Healthcare	US	\$130 billion
Technical leader	Government	US	\$336 billion
Product owner	Telecommunications	Global, US HQ	\$9.4 billion

KEY CHALLENGES

Before working with a Red Hat TAM, some interviewees relied on internal resources to use and manage their Red Hat software. Others, aware of the potential challenges involved from past experience at other companies, opted to sign on for a TAM at the same time they deployed Red Hat products.

The interviewees noted how their organizations struggled with common challenges before having a TAM, including:

- **In-house knowledge gaps.** When deploying Red Hat, interviewees' organizations were in a period of major digital transformation, such as a move to the cloud, that entailed rapid change and increased risk of failure.

As new users of Red Hat in their organizations' environments, even experienced technicians did not always have the deep familiarity needed to work with the speed and confidence to get the most value out of the Red Hat investment. When the teams ran into these issues, they wasted valuable time finding the right resources at Red Hat or escalating the issues when necessary.

- **Suboptimal use of developer/technician time.** One common result of this lack of familiarity, especially with regard to how Red Hat integrated with their own environments, was that developers

“The most crucial quality of the TAM from our perspective is the ability to connect our engineering and get information back and forth easily because they know the people on both sides.”

Product owner, telecommunications

spent more time testing and refining solutions than optimal. They were often unaware of useful shortcuts or workarounds that could save them additional time. As a result, solutions took longer than necessary to deploy and, in some instances, even required starting over from scratch.

- **System outages.** The most obvious — and usually most costly — challenge was that the teams' lack of deep understanding resulted in the launch of applications or other system changes that would cause an outage. While the impact of any given outage varied, there was the possibility of a catastrophic outage that would impair customer experience, damage brand reputation,

or otherwise cost the organization a significant amount of money.

SOLUTION REQUIREMENTS

Given the challenges noted above, the interviewees' organizations searched for a solution that could:

- Help close knowledge gaps by partnering with the organizations' teams on an ongoing basis to provide tips, steer them away from unproductive approaches, and deepen their understanding of how to use Red Hat products most effectively.
- Provide a fast response to any questions and issues that might arise on an ad hoc basis as solutions were developed and deployed.
- Give team management insight into the direction Red Hat's technology was moving to ensure productive integration going forward.

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the four interviewees, and it is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

Description of composite. Elevate Financial is a \$5 billion, global financial services firm focused on banking and investor services. The company operates in multiple countries in North America, Europe, and the Middle East with both retail branches and a strong online presence. Elevate employs 20,000 people, of whom 1,400 are developers working with Red Hat Enterprise Linux, OpenShift, and Ansible.

“We just felt it was valuable to have someone within Red Hat to help us navigate and to bring us a little bit closer to what’s going on in the company. To bring in us closer to what’s new and what’s in development, what’s on the road map.”

Senior manager and infrastructure systems engineer, healthcare

Key Assumptions For Elevate Financial:

- **Global banking firm**
- **\$5 billion revenues**
- **20,000 employees**
- **1,400 developers**

Analysis Of Benefits

■ Quantified benefit data as applied to the composite

Total Benefits						
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Improved developer/IT productivity	\$638,398	\$1,388,539	\$2,138,680	\$4,165,618	\$3,334,737
Btr	Reduced system outage costs	\$248,625	\$397,800	\$666,315	\$1,312,740	\$1,055,395
Ctr	Lowered technology fees	\$90,000	\$180,000	\$270,000	\$540,000	\$433,434
Dtr	Enhanced security/compliance	\$67,180	\$67,180	\$67,180	\$201,539	\$167,066
	Total benefits (risk-adjusted)	\$1,044,203	\$2,033,519	\$3,142,175	\$6,219,897	\$4,990,632

IMPROVED DEVELOPER/IT PRODUCTIVITY

Evidence and data. Interviewees described several ways in which their access to TAMs saved time, frustration, and duplication of effort for both developers and the IT teams supporting them.

- TAMs provided expertise or direct access to Red Hat resources to solve technical issues speedily. A technical leader in government told Forrester: “I was at another company and if we needed help, we had to call, wait on the phone, and get transferred around. Now, I send an email and

[our TAM] is on our chat within minutes. It’s a night and day difference in terms of access.”

- TAMs further ensured that the solutions adopted were the best way to solve a problem so that it did not reoccur or result in unintended issues. As a senior manager and infrastructure systems engineer in the healthcare industry described it, “[The TAM] has access to engineers and support teams at a much higher level than I would, which is a huge advantage in solving problems the proper way.”
- The long-term result of this fast and reliable problem resolution was that the interviewees’ organizations’ technical teams focused on advancing their projects rather than researching and testing solutions to problems. According to the senior manager and infrastructure systems engineer in healthcare: “My automation team doesn’t have to spend a bunch of time researching things that they can go learn from the TAM. So, now we can bring service offerings to market much faster.”
- On a more proactive level, TAMs combined a deep knowledge of both the Red Hat road map and interviewees’ plans for their organizations. Serving as adjunct team members, they ensured

“By explaining a problem to our TAM, we don’t have to engage so many people, escalate to upper management, or hire local vendors to help. We have an open communication channel.”

Application architect, financial services

“They propose tools and solutions based on products we have already purchased. This makes things go faster because we are more confident in selecting and using these tools.”

Application architect, financial services

that engineers, developers, and technicians did not waste time going down the wrong path, either on a specific project or an organization’s overall strategy as it related to Red Hat.

Modeling and assumptions. To model the value of this benefit, Forrester assumes the following:

- Elevate employs 1,400 full-time developers who spend approximately 60% of their hours actively contributing to development projects.
- Developers average a fully burdened annual salary of \$99,225.
- On average, 15% of a developer’s projects have the potential to be delayed or disrupted by suboptimal use of Red Hat products.

- Working closely with their TAMs, developers save 10% of time they would otherwise waste on those projects in Year 1, 25% in Year 2, and 40% in Year 3.
- Elevate Financial recovers 50% of that time saved in productive work for the organization.
- IT team members earn a fully burdened hourly salary of \$48. They interact with developers and with Red Hat to resolve questions and issues relating to use of Red Hat Enterprise Linux (RHEL), OpenShift, and Ansible.
- Before working with TAMs, technicians spent a total of 7,500 hours per year resolving those issues and tickets.
- With the aid of a TAM who has deep knowledge of the software and who can connect technicians directly with the appropriate Red Hat engineer(s) when necessary, that time investment is cut to 252 hours per year.

Risks. The risk that another organization will experience a different magnitude of value from this benefit depends on:

- The amount of time wasted by both developers and IT team members due to misunderstanding or suboptimal use of Red Hat technology.
- The salaries of the developers and technicians.
- The magnitude of the improvement the TAM brings, and its rate of increase over time.
- The degree to which time saved is recaptured by the organization as productive work.

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 \$3.3 million.

Time savings for developers (Year 3)

40%



Improved Developer/IT Productivity					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Number of developers employed	Composite	1,400	1,400	1,400
A2	Time spent directly on applications and related projects	Assumption	60%	60%	60%
A3	Average fully burdened annual developer salary	TEI standard	\$99,225	\$99,225	\$99,225
A4	Portion of projects affected	Interviews	15%	15%	15%
A5	Time saved with TAM guidance	Interviews	10%	25%	40%
A6	Productivity recapture	TEI standard	50%	50%	50%
A7	Subtotal: Developer time savings	$A1 \cdot A2 \cdot A3 \cdot A4 \cdot A5 \cdot A6$	\$625,118	\$1,562,794	\$2,500,470
A8	Average annual IT hours to resolve issues before TAM	Interviews	7,500	7,500	7,500
A9	Average annual IT hours to resolve issues with TAM	Interviews	252	252	252
A10	Average IT team hourly wage	A3/2,080	\$48	\$48	\$48
A11	Subtotal: IT team time savings	$(A8 - A9) \cdot A10 \cdot A6$	\$172,880	\$172,880	\$172,880
At	Improved developer/IT productivity	A7+A11	\$797,998	\$1,735,674	\$2,673,350
	Risk adjustment	↓20%			
Atr	Improved developer/IT productivity (risk-adjusted)		\$638,398	\$1,388,539	\$2,138,680
Three-year total: \$4,165,618			Three-year present value: \$3,334,737		

REDUCED SYSTEM OUTAGE COSTS

Evidence and data. TAMs used their expertise and guidance to roll out their customer teams’ migrations, new offerings, and other projects more smoothly. Many of the interviewees noted the initiatives they worked on had the potential to impact both internal operations and customer experience. With a TAM providing advice on design and insight on recent or upcoming changes in Red Hat software, the risk that the impact would be negative was greatly reduced.

- An application architect in the financial services industry explained it this way: “The TAM service includes continuous review of our environment and sessions with them where they communicate new technologies and trends to us. They are by

our side when we design new solutions, so we are more confident in what we are designing and we mitigate the risk of doing things the wrong way and causing loss of time and money.”

- The same interviewee went on to explain: “The whole migration to the private cloud was very risky because we had to migrate not only the infrastructure, but the application itself. In the whole migration process we had only two critical incidents, instead of the dozens of incidents our management expected.”
- A senior manager and infrastructure engineer in healthcare provided additional insight into this benefit: “It’s an ongoing migration from Ansible onto [Ansible Automation Platform] AAP and the

TAM is invaluable for that. [Our TAM] works with us on every detail and if we've got questions, we go to the TAM and either [they have] the answer or [they get] it fast.”

Modeling and assumptions. To model the value of this benefit, Forrester assumes the following:

- The composite organization experiences an average of one major customer-facing system outage every three years and 10 minor internal system outages each year.
- Major outages cost an average of \$500,000 and minor outages cost an average of \$100,000.²
- The participation of Red Hat TAMs in Elevate’s key projects results in a significant reduction in such outages, beginning with a 25% cut in Year 1 and growing to 67% in Year 3.

Risks. The risk that another organization will experience a different magnitude of value from this benefit depends on:

- The number and severity of system outages they experience.
- The portion of those outages that can be eliminated or mitigated by improved use of Red Hat products.
- The rate at which the TAM’s assistance improves system stability.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of \$1.1 million.

Reduced System Outage Costs					
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Major unplanned outages	Interviews	0.34	0.34	0.34
B2	Average cost per major outage	Forrester research	\$500,000	\$500,000	\$500,000
B3	Minor unplanned outages	Interviews	10	10	10
B4	Average cost per minor outage	Forrester research	\$100,000	\$100,000	\$100,000
B5	Outage time saved with TAM	Interviews	25%	40%	67%
Bt	Reduced system outage costs	$((B1*B2)+(B3* B4))*B5$	\$292,500	\$468,000	\$783,900
	Risk adjustment	↓15%			
Btr	Reduced system outage costs (risk-adjusted)		\$248,625	\$397,800	\$666,315
Three-year total: \$1,312,740			Three-year present value: \$1,055,395		

LOWERED TECHNOLOGY FEES

Evidence and data. The TAMs’ deep understanding of both the Red Hat technology and their interviewees’ organization’s usage of it allowed them to identify opportunities to consolidate or retire products and subscriptions as the customers began to use the technology more efficiently. As advocates for their customers, TAMs alerted the interviewees of these situations even if it did not benefit Red Hat directly in the short term.

The senior manager and infrastructure systems engineer in healthcare told Forrester: “We worked with [our TAM] to get good and accurate reporting on our licenses, and we were able to reduce a lot of old part numbers we weren’t actually using. We also eliminated a bunch of licenses we were paying for on servers that have been retired.”

Modeling and assumptions. To model the value of this benefit, Forrester assumes:

- Elevate pays \$2 million annually to Red Hat for its use of RHEL, OpenShift, and Ansible.
- The TAM identifies opportunities for consolidation that save the organization 5% of its annual fees in Year 1 and continues to identify similar opportunities as they become more familiar with Elevate’s use of Red Hat products.

Risks. The risk that another organization will experience a different magnitude of value from this benefit depends on:

- Their total annual Red Hat software licensing costs.
- The degree to which their use of Red Hat products leaves room for consolidation or rationalization.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of over \$433,000.

Lowered Technology Fees					
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Annual fees paid	Interviews	\$2,000,000	\$2,000,000	\$2,000,000
C2	Average subscription consolidation	Interviews	5%	10%	15%
Ct	Lowered technology fees	C1*C2	\$100,000	\$200,000	\$300,000
	Risk adjustment	↓10%			
Ctr	Lowered technology fees (risk-adjusted)		\$90,000	\$180,000	\$270,000
Three-year total: \$540,000			Three-year present value: \$433,434		

ENHANCED SECURITY/COMPLIANCE

Evidence and data. Interviewees described to Forrester some of the ways their TAMs contributed to lowering security risks in their organizations. These ranged from indirect support, such as providing advance notice of changes at Red Hat or new security threats, to more hands-on assistance in closing specific vulnerabilities.

- The technical lead at a government agency described an example of the more specific type of assistance: “A lot of times we get these third-party products in and ... we have to troubleshoot through them to make sure and fix their security problems essentially. [Our TAM] is essential in those situations.”

“The TAMs really help us to manage the lifecycle of the product so that we know when things are about to go off of support, and we can get our customers, our development teams and whoever to migrate their stuff off of the old versions onto the newer versions.”

Senior manager and infrastructure systems engineer, healthcare

Modeling and assumptions. To model the value of this benefit, Forrester assumes the following:

- Breaches will happen and they will sometimes go unnoticed. Forrester defines a breach as an incident resulting in the loss or compromise of

data, accompanied by material remediation costs. The data represented here is based upon the breach activity of an organization of a similar size to Elevate Financial. These organizations were likely to see 2.4 material breaches per year.³

- The cost of recovery from a breach was highly correlated to the size and revenue of organizations. In this case, the internal and external costs of each breach average close to \$1.5 million.⁴
- In addition, the security staff of five full-time employees (FTEs) spends 65% of its time preventing cyberattacks.
- The security staff earns an average fully burdened hourly wage of \$65.
- With the guidance of their TAM and considering that security defenses are already in place, the overall reduction in breach costs is an additive 2% beyond the other solutions in place.

Risks. The risk that another organization will experience a different magnitude of value from this benefit depends on:

- Their average annual rate of security breach may be higher or lower than Elevate Financial's.
- The average cost of their breaches may differ.

Depending on their security stance before engaging the TAM, the TAM's impact on security may be higher or lower than in the model.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of \$167,100.

Enhanced Security/Compliance					
Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Average breaches per year	Forrester research	2.4	2.4	2.4
D2	Average cost of breach	Forrester research	\$1,463,481	\$1,463,481	\$1,463,481
D3	Subtotal: Projected annual cost of breaches	D1*D2	\$3,512,354	\$3,512,354	\$3,512,354
D4	Cybersecurity FTEs	Composite	5	5	5
D5	Annual hours per FTE doing ongoing prevention work (not breach response)	2,080 hours*65%	1,352	1,352	1,352
D6	Average fully burdened hourly wage of security staff	TEI standard	\$65	\$65	\$65
D7	Subtotal: Annual cost of security incident prevention	D4*D5*D6	\$439,400	\$439,400	\$439,400
D8	Security cost reduction due to TAM	Interviews	2%	2%	2%
Dt	Enhanced security/compliance	(D3+D7)*D8	\$79,035	\$79,035	\$79,035
	Risk adjustment	↓15%			
Dtr	Enhanced security/compliance (risk-adjusted)		\$67,180	\$67,180	\$67,180
Three-year total: \$201,539			Three-year present value: \$167,066		

UNQUANTIFIED BENEFITS

Interviewees mentioned the following additional benefits that their organizations experienced but were not able to quantify:

- **Accelerated knowledge transfer to team.** The TAMs’ depth of knowledge about Red Hat products not only saved the team time working on specific projects, but then also became institutional knowledge for the interviewees.
- **Better solutions from collaborative thinking.** Several interviewees told Forrester that their TAMs are always thinking about ways the interviewees’ organizations could use the technology more successfully. They rely on their TAMs for brainstorming and as a second set of eyes on key projects.

FLEXIBILITY

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

- **Forward-looking technology strategy.** TAMs provided interviewees with up-to-date (or even advance) insights into Red Hat’s road map, which improved their organizations’ overall technology strategy and planning, so they are in a better position to respond to market conditions.

The application architect at a financial services company shared: “The private cloud is very new for us. Something that is a very moving environment. Everything changed from day to day. We cannot follow the way the things are moving. So, having the OpenShift TAM with us is very helpful because [the TAM] always helps us with predicting what will happen in the future.”

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

“I would say that our TAM helps people upgrade their skills. People that are working closely with a TAM learn a lot.”

Application architect, financial services

Analysis Of Costs

■ Quantified cost data as applied to the composite

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Red Hat fees	\$0	\$378,000	\$378,000	\$378,000	\$1,134,000	\$940,030
Ftr	Ongoing management	\$0	\$41,184	\$41,184	\$41,184	\$123,552	\$102,419
	Total costs (risk-adjusted)	\$0	\$419,184	\$419,184	\$419,184	\$1,257,552	\$1,042,449

RED HAT FEES

Evidence and data. Interviewees told Forrester that the fee for a TAM's services was straightforward at approximately \$120,000 per year.

Modeling and assumptions. To model this cost, Forrester assumes the following:

- Elevate uses one TAM for each of its key Red Hat software subscriptions: RHEL, OpenShift, and Ansible.
- The fee per TAM is \$120,000 per year. This is a standard list price, and fees may vary depending on an organization's unique characteristics. Please contact Red Hat for additional details.

Risks. The likelihood that other organizations will experience a different cost is driven by:

- The array of Red Hat products they use.
- Whether or not they choose to use a TAM for each of those products.
- Other factors that might affect the annual fee per TAM. To understand these variables fully, readers should contact Red Hat.

Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of \$940,000.

Red Hat Fees						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
E1	Fee per TAM	Composite		\$120,000	\$120,000	\$120,000
E2	Number of TAMs	Composite		3	3	3
Et	Red Hat fees	E1*E2		\$360,000	\$360,000	\$360,000
	Risk adjustment	↑5%				
Etr	Red Hat fees (risk-adjusted)		\$0	\$378,000	\$378,000	\$378,000
Three-year total: \$1,134,000				Three-year present value: \$940,030		

ONGOING MANAGEMENT

Evidence and data. Forrester learned from the interviewed executives that ongoing management of the TAM relationship did not involve out-of-pocket costs. It consisted entirely of the time their team members spent in (generally weekly) meetings with the TAM associated with the Red Hat software they were using.

Modeling and assumptions. To model this cost, Forrester assumes the following:

- Three TAMs each participate in one customer team meeting per week.
- Five IT team members participate in each weekly meeting.
- Participating IT team members earn a fully burdened hourly wage of \$48.

Risks. The likelihood that other organizations will experience a different cost is driven by:

- The number of TAMs the organization uses.
- The frequency of team meetings with the TAM.
- The number of employees taking part in each TAM meeting.

“There’s a cost involved there, but boy, I’m glad to spend that money.”

Senior manager and infrastructure systems engineer, healthcare

- The IT team’s average rate of pay.

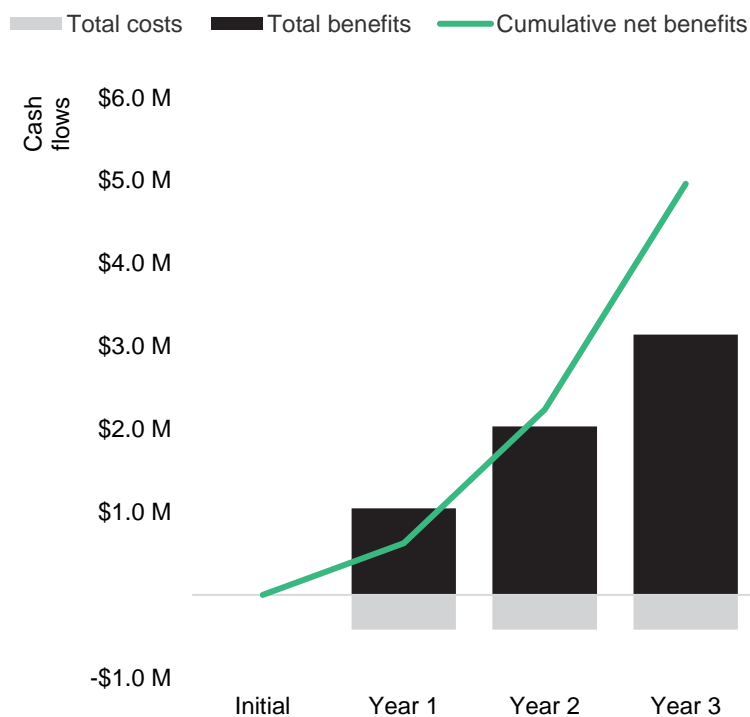
Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of \$102,000.

Ongoing Management						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Meeting hours per year per TAM	Interviews		52	52	52
F2	IT team members per meeting	Interviews		5	5	5
F3	Average fully burdened hourly wage	TEI standard		\$48	\$48	\$48
F4	Number of TAMs	Composite		3	3	3
Ft	Ongoing management	F1*F2*F3*F4	\$0	\$37,440	\$37,440	\$37,440
	Risk adjustment	↑10%				
Ftr	Ongoing management (risk-adjusted)		\$0	\$41,184	\$41,184	\$41,184
Three-year total: \$123,552			Three-year present value: \$102,419			

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Analysis (Risk-Adjusted Estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	\$0	(\$419,184)	(\$419,184)	(\$419,184)	(\$1,257,552)	(\$1,042,449)
Total benefits	\$0	\$1,044,203	\$2,033,519	\$3,142,175	\$6,219,897	\$4,990,632
Net benefits	\$0	\$625,019	\$1,614,335	\$2,722,991	\$4,962,345	\$3,948,183
ROI						379%
Payback period						<6 months

Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.



PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



NET PRESENT VALUE (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made unless other projects have higher NPVs.



RETURN ON INVESTMENT (ROI)

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



DISCOUNT RATE

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



PAYBACK PERIOD

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

Appendix B: Endnotes

¹ Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

² Source: Forrester Consulting Cost Of A Cybersecurity Breach Survey, Q4 2020.

³ Source: Ibid.

⁴ Source: Ibid.

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