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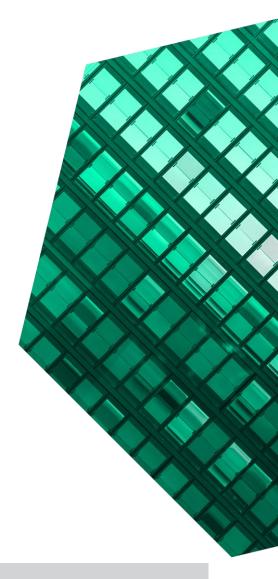
Cost Savings And Business Benefits Enabled By ForgeRock's CIAM Solution

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ABOUT FORRESTER CONSULTING

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Executive Summary

Identity is the front door of an enterprise's digital experience but is often managed and delivered through legacy tools and disparate systems, creating data risk exposure and poor customer experiences. By adopting a unified identity platform, enterprises have an opportunity to treat digital identity and identity access management as a key strategic initiative and work to develop and deliver differentiated experiences that delight customers and drive loyalty and profitability.

ForgeRock helps organizations simply and safely access the connected world with an enterprise-grade identity platform that makes it easy to manage, secure, and govern all identity types at internet scale across any environment.

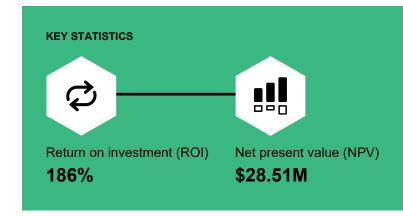
ForgeRock commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying ForgeRock Customer Identity And Access Management (CIAM).¹ The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of ForgeRock's CIAM solution on their organizations by deploying ForgeRock's CIAM solution in the cloud, on-premises, and in hybrid environments.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed seven representatives at five organizations with experience using ForgeRock's CIAM solution. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization that is a U.S.-

Reduced maintenance effort for CIAM

40%





based global financial services conglomerate with 30 million customer identities and revenue of \$30 billion per year. The composite organization used for this analysis has a hybrid IT environment with some components in the cloud and others in the corporate data center.

Prior to using ForgeRock's CIAM solution, the interviewees' organizations leveraged a mix of homegrown and point solutions to manage and secure their customers. However, these prior attempts yielded limited success, leaving the organizations locked into costly and resource-intensive environments not agile enough to keep up with business needs and rife with security and compliance risks due to identity silos and blind spots. These limitations impeded business objectives such as integrating with modern architectures or achieving a single view of the organizations' customers to improve customer experience.

After the investment in ForgeRock's CIAM solution, the interviewees' organizations gained a unified platform for all identity types with the ability to integrate with legacy and modern applications within complex environments. Key results from the investment include legacy infrastructure savings. reduced fraud and security risks, reduced IAM complexity and development effort, and cost savings from call-center efficiencies and security-related call reductions.

KEY FINDINGS

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

- Legacy environment savings of \$8.1 million. Implementing ForgeRock's CIAM solution allows the composite organization to remove legacy infrastructure, including multiple lightweight directory access protocols (LDAPs) and a legacy authentication layer. Additionally, the composite organization takes advantage of ForgeRock's CIAM solution deployment to migrate some applications from on-premises to the cloud, creating additional savings. The removal of legacy infrastructure, consolidation to a single platform, and movement of some applications to the cloud simplifies and reduces maintenance team efforts by 40%, resulting in additional savings of eight full-time equivalents (FTEs).
- Avoided development costs of \$1.3 million. The organization is able to reduce custom development work and time-consuming technology integrations by using ForgeRock's Intelligent Access Trees to build customer journeys that are personalized and secure. The ForgeRock solution also allows the organization to avoid implementing costly compliance and security tools, enabling it to reallocate identity professionals to higher-value initiatives. By switching to ForgeRock's CIAM solution, the

- organization achieves \$1.3 million in development cost savings over three years.
- 40% reduction in security-related calls to the call center resulting in \$23.9 million in savings. With ForgeRock's CIAM solution, the composite organization is able to create a single customer record and track all interactions across channels. This enables capabilities like selfservice password resets, multifactor authentication, passwordless login, and single sign-on for customers. Introducing these additional options and enabling and promoting self-service for customers drastically reduces the number of password and security-related calls at the call center, saving \$23.9 million over three years.
- \$5.9 million in improved time-to-value for new releases. With ForgeRock providing the single CIAM platform and with its Intelligent Access Trees' no-code orchestration, the composite organization can push out new releases and updates much faster and with less effort than before. These updates have a material impact on both user experience and business outcomes, and include adding features like multifactor authentication, passwordless login, and improving customer experience through removing loading screens, adjusting login or validation journeys, or enabling omnichannel experiences.

Customer Conversion Rate:

More than two times improvement in customer conversion rate for digital

Before 30% 70%

After

In addition to working faster, ForgeRock's CIAM solution enables the composite organization to push out more releases and updates, creating net-new revenue streams and further improving customer experience and security. Outcomes from these initiatives include improved Net Promoter ScoresSM, reduced login time, increased conversion rates and improved customer lifetime value.²

Reduced instances of fraud, resulting in \$4.7 million in savings. ForgeRock's CIAM solution empowers companies to reduce fraud. Its Intelligent Access Trees allow the composite organization to build sophisticated identity journeys that greatly improve verification confidence, accuracy, and speed. ForgeRock Identity Gateway enable the composite organization to build out better and more secure verification practices, and ForgeRock's trusted partner network gives the composite organization access to out-of-the-box solutions that have an immediate impact on reducing fraud. With ForgeRock's CIAM solution, the composite organization significantly reduces instances of account takeovers and fraudulent purchases.

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

described improvements in customer experience with their organization's customers. One noted that in one market, login time decreased from 90 seconds to well less than 1 second. Another interviewed representative stated that ForgeRock's single-login experience across all services also enabled a passwordless customer experience and reduced friction because customers validated identities in a different channel. The company also eliminated a "please wait" page for logins because validation now occurred faster. Another interviewee said customer login frequency increased by 400%,

- from five times to 25 times a month, over the course of six months, and that ratings of their organization's mobile application improved from 1.5 stars to 4.8 stars in a matter of months.
- their organization saw benefits in new customer acquisition. After deploying ForgeRock's CIAM solution, the company's conversion rate increased from 30% to 70%. Due to ForgeRock's integration with the onboarding journey, the organization saw an increase in the proportion of customers registered for digital, as well as a lifetime value increase of 2.5 times for digital-registered customers. The interviewee also noted an increase in customers purchasing new products. They said ForgeRock provides better data that allowed their organization to allocate funds to underserved markets.
- One interviewed executive, a head of IAM in the telecommunications industry, said that in their organization's legacy environment, the team spent 1 to 2 hours per week approving fraud reduction activities. The interviewee said: "We have onboarded new channels and services, massively increasing our fraud potential, but because of ForgeRock's advanced capabilities, I no longer need to be involved." What previously

took hours takes no time at all, and teams

autonomously approved changes.

Executive efficiency and team empowerment.

- Report savings. One interviewee noted that
 ForgeRock made it easier to pull standardsbased and IDP-based reports, resulting in
 investigations conducted with less effort. Another
 interviewee noted a reduction in the time needed
 to pull reports for audits and internal reporting
 from weeks to real time, reducing the workload
 from three FTEs to one FTE.
- Platform flexibility and extensibility.
 Interviewees described ForgeRock as a partner with a strong support model heavily invested in

3

the future, rather than just as a vendor. They reported that ForgeRock listened to customer needs and product roadmaps, demonstrating a focus on cutting-edge products and feature-rich but carrier-grade, stable, and scalable software.

According to Forrester research, organizations moving IAM infrastructure fully to cloud-based Identity-as-a-Service solutions could see further operational cost benefits of up to 80%.³



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

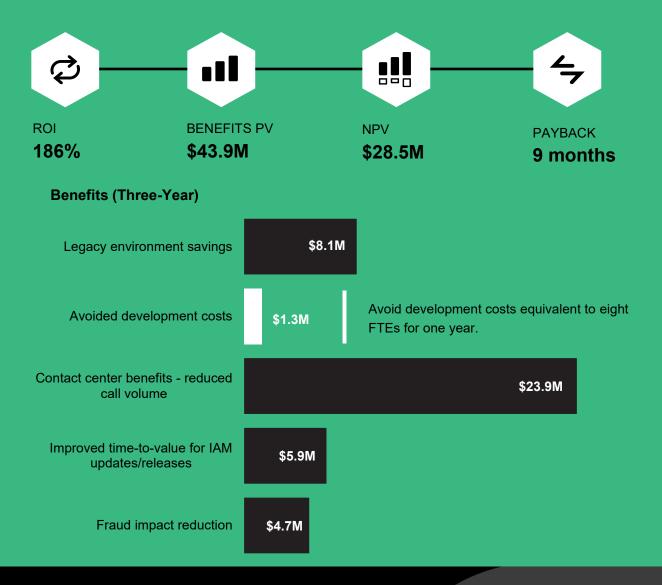
- Implementation costs. Implementation efforts include operationalization and management integration as well as professional services and infrastructure costs. The composite organization takes a phased approach, continuously onboarding new applications over three years while removing the legacy infrastructure and tools. The composite organization spends a total of \$6.2 million over three years on implementation and deployment.
- Licensing and maintenance costs. The
 composite organization spends a total of \$9.1
 million on licensing and maintenance costs,
 including ongoing support over three years.
 ForgeRock licensing includes access to stage
 and development tenants. It enables
 organizations to also deploy on-premises and in
 the cloud. The cost does not have any rate limits
 and does not increase with user activity.
 Licensing costs in this model include volume
 discounts but sales discretionary discounts may
 apply based on specific characteristics of the
 organization.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$43.86 million over three years versus costs of \$15.35 million, adding up to a net present value (NPV) of \$28.51 million and an ROI of 186%.

Glossary Of Terms And ForgeRock Products

Throughout this TEI analysis, we reference specific products that created value for customers. Each product is defined below with additional context to help readers understand and contextualize the results.

- The ForgeRock Identity Platform: The ForgeRock Identity Platform includes a full suite of AI-powered identity management, access management, and identity governance capabilities to serve the CIAM, workforce, and internet-of-things (IoT) needs of enterprises. The company provides a proprietary platform that offers software-as-a-service (SaaS), selfmanaged software, and hybrid deployment choices.
- ForgeRock Intelligent Access (commonly referred to as "Trees"): ForgeRock Intelligent Access (part of the ForgeRock Identity Platform) is a no-code/low-code orchestration and intelligence engine that enables ForgeRock customers to personalize and secure user journeys for any identity type. Customers can design, test, and deploy prebuilt user journey workflows for registration, fraud prevention, authentication, authorization, self-service and more, with extensive integrations.
- ForgeRock Identity Gateway: ForgeRock Identity Gateway (part of the ForgeRock Identity Platform) is an intelligent, identity-aware proxy that delivers a flexible, high-performance, standards-based approach to securing onpremises and cloud services.



"I find the central policy framework really cool. The user experience is consistent over the app, portal, or dashboard. If security needs to change access rights, we can do that at runtime on portal, app, [and the] dashboard all at once. I'm sleeping much better at night. For a multiservice provider, this is the only way forward."

Head of IAM, telecommunications



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 ForgeRock's CIAM solution.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that ForgeRock's CIAM solution can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by ForgeRock 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 ForgeRock.

ForgeRock 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.

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



DUE DILIGENCE

Interviewed ForgeRock stakeholders and Forrester analysts to gather data relative to ForgeRock's CIAM solution.



INTERVIEWS

Interviewed seven representatives at five organizations using ForgeRock's CIAM solution to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

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



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the 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 ForgeRock CIAM Customer Journey

Drivers leading to the ForgeRock CIAM solution investment

Interviews			
Role	Industry	Region	Annual revenue
Principal security architect	Financial services	U.S.	\$36 billion
Principal technical architect	Financial services	U.S.	\$36 billion
Global head of secure access	Financial services	Global	\$50 billion
Director of corporate information security	Telecommunications	Global	\$133 billion
Executive director of IAM and product services	Telecommunications	Global	\$133 billion
Head of IAM	Telecommunications	EMEA	\$11 billion
Principal product manager	Health insurance	U.S.	\$86 billion

KEY CHALLENGES

Before using ForgeRock, all of the interviewees' organizations ascribed to a build-over-buy mentality, using a mix of homegrown and highly customized IAM solutions for customer identity and access that could no longer scale to meet business needs. One organization used a point solution that covered limited use cases and resulted in infrastructure and data silos as well as fractured user experiences. All interviewees described a splintered view of the customer.

The interviewees noted how their organizations struggled with common challenges, including:

Unmet enterprise compliance requirements.
 Interviewees said one of the most important requirements for their organizations was related to business compliance regulations and requirements that had become too much to manage despite different iterations of homegrown solutions.

A head of IAM in the telecommunications industry described complications specifically surrounding midsized to large businesses. They said: "We

"ForgeRock [CIAM] was the tool that we were missing. [It's] better than a firewall. [It's] better than a WAF (web application firewall)."

Executive director of IAM and product services, telecommunications

had multiple stack function overlap, but at the same time, [we] had many gaps. One of the key pressure points around working with midsized to large companies was addressing our lack of broker infrastructure. A broker strategy we leveraged with ForgeRock to build was federation trust. With ForgeRock, we replaced three legacy systems."

 A principal security architect in the financial services industry described difficulty maintaining and updating homegrown features to uphold

compliance requirements. They said: "Over time, we already built two or three modernized iterations of the authentication stack. It was hard to keep up. Even though we were able to refactor, the new requirements [and] introducing a new authenticator and registration were all too much to manage." The company needed a new solution flexible enough to accommodate some of the homegrown infrastructure and meet compliance requirements.

 High maintenance, development, and operational costs. Each interviewee said that for their organization, homegrown solutions proved costly, whether due to heavy code, multiple systems linked together introducing complications, or hundreds of support tickets a day hitting the developers. These prior solutions were resource-intensive and difficult to manage with manual processes.

A global head of secure access in the financial services industry said their organization came to realize that homegrown authentication platforms built 10 to 15 years ago were unlikely to keep the company on the cutting edge. The interviewee cited several costs, including operational costs, contact center costs, and fraud costs. They said: "Looking at each cost, it was difficult for the team to figure out how to solve those with the existing homegrown solutions. At the authentication layer, they identified ForgeRock [CIAM] as being market-leading, robust, reliable, and scalable."

The same interviewee said: "One operational cost of running the [prior] platform is the call volumes associated with the journeys. They were both high-volume and high-generation calls."

Inability to integrate with modern IT systems.
 A principal security architect in the financial services industry noted: "Our legacy platform didn't support things like OpenID Connect."
 Describing the importance of integration to business goals, he said: "We ended up

- integrating ForgeRock access management with the gateway that we already have. Those types of API integration requirements are critical to us."
- Poor customer experience. Each interviewee classified customer experience as integral to their organization's business objectives. One objective was to reduce the number of security-related calls and increase call-center efficiencies.
- A principal technical architect in the financial services industry noted interruptions to their organization's customer experience. They said: "We came across the idea that two-factor authentication and security is important, but we realized that the vast majority of our interactions on the website weren't necessarily risky. So, we built the industry-influencing concept of riskbased authentication (RBA). We're finding that in some cases, risk-based authentication is problematic because it interrupts the customer experience by introducing more security measures in the middle of the flow. So, with ForgeRock [CIAM], we quickly moved aggressively from an adaptive experience to a seamless one up front."
- A principal security architect in the financial services industry described the importance of a nonprescriptive approach to improve customer experience. They said: "We want to give different modalities functionality types to our incoming customers so they can authenticate with us through both their authenticator and channel of choice, whether that was our digital channels, mobile channels, etc. We were very customerfocused on what we wanted from our authentication systems. We wanted our customers to be able to choose whatever authenticator they wanted to bring."

WHY FORGEROCK'S CIAM SOLUTION?

The interviewees' organizations searched for a solution that was scalable, reliable, and extensible. The solution needed to be flexible enough to

accommodate homegrown infrastructure and integrations while remaining unified, cloud-friendly, agile, and feature-rich with broad capabilities. Investment objectives include:

- Generating more revenue with faster conversions and tailored experiences across all channels including web, mobile, and call centers.
- Improving customer experiences by giving customers choice in how they want to authenticate, providing privacy and consent controls, and removing customer friction at login without sacrificing security.
- Improving security and control to ensure compliance with enterprise security needs and providing customers with superior account security and individual privacy.
- Reducing complexity with one IAM solution that could integrate across existing IT stacks and environments.

Interviewees said ForgeRock's CIAM solution provided their organizations with the following key capabilities:

- High scale and performance. Interviewees'
 organizations support tens to hundreds of
 millions of identities, and they needed to be able
 to meet peak usage spikes and demand without
 throttling customers so that customers could
 easily and safely access services.
- The ability to build exceptional user experiences without compromising security and privacy. ForgeRock's CIAM solution enabled interviewees' organizations to provide highly personalized and secure digital identity experiences for their consumers across channels and devices, which led to better customer acquisition, loyalty, and retention while reducing friction and fraud.
- Agility with no-code or low-code journey orchestration. With ForgeRock Intelligent

Access Trees, CIAM teams saved time, money, and resources by easily designing prebuilt user journeys for registration, authentication, and account management.

"The idea that I could take what took me years to build and basically get that out of the box from ForgeRock and have it running in a matter of days is phenomenal."

Principal technical architect, financial services

- Integration with complex environments.
 - Coexistence with legacy homegrown systems means enterprises can modernize legacy applications without disrupting security or customer experience. Having the ability of ForgeRock's CIAM solution to operate across cloud, on-premises, and in hybrid environments means the interviewees' organizations are supported throughout their digital transformation and cloud migration journeys, regardless of starting point or destination.
- Unified platform. Implementing one CIAM solution for all identity types and use cases enabled the interviewees' organizations to consolidate vendors and save.
- Hybrid cloud approach. Interviewees' organizations benefited from deployment flexibility and gradually moved to the cloud at their own paces.



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 seven 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. The global, multibillion-dollar financial services company is based in the U.S. and has 20,000 employees. It provides sales and customer support for its consumer products in high volume. The composite organization has a strong brand, global operations, a large customer base of about 30 million customers, and a strong online and offline presence.

The composite organization has multiple lines of business as well as both B2C and B2B products and services, and it has added both products and internal technology capabilities through mergers and acquisitions. The organization is committed to providing high-quality customer experience regardless of product or channel. The CIAM support team is comprised of 20 FTEs responsible for managing and maintaining the CIAM solution internally.

Deployment characteristics. The composite organization used for this analysis has a hybrid IT environment with some components in the cloud and others in the corporate data center. The composite initially deploys ForgeRock's CIAM solution in a hybrid capacity, supporting both on-premises and cloud-based applications. The composite organization is undergoing a larger digital transformation effort, moving applications off on-premises servers into a private cloud while deploying ForgeRock's CIAM solution.

Key Assumptions

- \$30 billion annual revenue
- Hybrid deployment
- 30 million identities
- 20 members on the FTE CIAM management team

Analysis Of Benefits

Quantified benefit data as applied to the composite

Total	Total Benefits									
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value				
Atr	Legacy environment savings	\$2,213,100	\$3,319,650	\$4,426,200	\$9,958,950	\$8,080,891				
Btr	Avoided development costs	\$1,410,750	\$0	\$0	\$1,410,750	\$1,282,500				
Ctr	Contact center benefits - reduced call volume	\$2,337,500	\$9,350,000	\$18,700,000	\$30,387,500	\$23,901,860				
Dtr	Improved time-to-value for IAM updates/releases	\$1,078,846	\$2,157,691	\$4,192,787	\$7,429,323	\$5,914,087				
Etr	Fraud impact reduction	\$475,000	\$1,900,000	\$3,562,500	\$5,937,500	\$4,678,625				
	Total benefits (risk-adjusted)	\$7,515,196	\$16,727,341	\$30,881,487	\$55,124,023	\$43,857,963				

LEGACY ENVIRONMENT SAVINGS

Evidence and data. Disparate systems create silos across departments. Whether the interviewees' organizations aimed to replace their disparate homegrown solutions with ForgeRock's CIAM solution entirely or to use it to modernize legacy applications, interviewees reported that ForgeRock's CIAM solution provided a single platform to consolidate vendors across a variety of identity types and use cases. This resulted in legacy environment savings from hardware, software, and FTE savings.

- Prior to deploying ForgeRock's CIAM solution, interviewees' organizations struggled with solutions comprised of multiple systems linked together that proved code-heavy and difficult to manage, especially with new iterations. A principal technical architect in the financial services industry said that after deploying ForgeRock's CIAM solution, their organization saved hundreds of thousands of dollars by eliminating just one vendor. The interviewee added: "That's not even including the hardware or development costs, but just the licensing of a single vendor." The interviewee also noted their organization's investment into the environment shifted from CapEx to OpEx.
- Interviewees said using ForgeRock's CIAM solution to consolidate vendors to a single platform alleviated integration efforts. A head of IAM in the telecommunications industry said: "We selected ForgeRock [CIAM] for the feature-richness of the product. For our business challenges as a multiservice provider, we needed broad capability and integration. I don't want to have a single tool from a different provider, because that's just too much of a pain."
- A global head of secure access in the financial services industry said their organization spent \$10 million a year on security tokens in its legacy environment and that ForgeRock's CIAM solution is part of the solution they used to effectively eliminate the use of tokens.

"We've retired multiple large, costly vendors in favor of using ForgeRock out of the box. By eliminating just one vendor, we saved hundreds of thousands."

Principal technical architect, financial services

Modeling and assumptions. To model the measurable impact of ForgeRock's CIAM solution on the composite organization's legacy environment savings, Forrester applies the following assumptions:

- According to Forrester research, organizations can expect to experience varying levels of cost savings depending on their legacy environment.

 Organizations migrating from a manual IAM process will experience the greatest cost savings from automation and cloud services. Areas of cost savings include reduced personnel costs for IAM activities, reduced security costs, reduced help-desk identity administration costs, reduced compliance costs, and reduced costs related to keeping IAM capabilities agile.
 - Organizations moving IAM infrastructure fully to cloud-based Identity-as-a-Service solutions could see further operational cost benefits of up to 80%.³
- The composite organization operates in a hybrid environment as it deploys ForgeRock's CIAM solution, taking advantage of the deployment to move some applications from on-premises to the cloud.
- After deploying ForgeRock's CIAM solution, the composite organization sees \$2 million in savings

from infrastructure removal and sunsetting LDAPs, as well software and licensing, and hardware and maintenance savings from moving applications to the cloud.

- As more applications are migrated to ForgeRock's CIAM solution, the composite organization is able to sunset more legacy infrastructure and related vendors, and it continues to move certain applications off onpremises servers into a private cloud.
- These changes also reduce the maintenance efforts of the IAM team by 40% by Year 3, resulting in additional FTE savings of eight FTEs.

Risks. The value of this benefit may depend on the following variables:

- The organization's legacy environment.
- The organization's baseline average labor rate.
- The organization's ability to reallocate labor to higher-value tasks.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$8.1 million.

Lega	cy Environment Savings				
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Legacy environment savings *see modeling and assumptions for additional context	Composite	\$2,000,000	\$3,000,000	\$4,000,000
A2	IT maintenance team members	Composite	20	20	20
A3	Reduction in maintenance effort from consolidating to a single platform	Composite	20%	30%	40%
A4	FTE savings from reduced maintenance	A2*A3	4	6	8
A5	Average salary of IT maintenance team member	TEI Standard	\$114,750	\$114,750	\$114,750
At	Legacy environment savings	A1+(A4*A5)	\$2,459,000	\$3,688,500	\$4,918,000
	Risk adjustment	↓10%			
Atr	Legacy environment savings (risk-adjusted)		\$2,213,100	\$3,319,650	\$4,426,200
	Three-year total: \$9,958,950		Three-year pre	esent value: \$8,080,89	91



AVOIDED DEVELOPMENT COSTS

Evidence and data. Interviewees noted that ForgeRock's CIAM solution provided out-of-the-box solutions their organizations could take advantage of right away and that it was flexible and extensible enough to develop highly customized solutions to their specific business needs. With ForgeRock's CIAM solution, interviewees' organizations could commoditize the commodity-based features, like fast identity online (FIDO) features, passwordless authenticators, and push authentications. This liberated teams to focus efforts on new developments and business objectives, expanding their products and enabling additional customizations.

- Describing the ability to integrate and the alleviation of needing to build from scratch, a director of corporate information security in the telecommunications industry said: "We view that as value-add. There are more integrations coming online, so we can focus on what we want, and ForgeRock tells us the actions to take. One thing ForgeRock provides is a GUI (graphical user interface) login flow connector where we build nodes and connect the lines almost like trees. And so, we take that tree and plug in what we want. Then, we can focus on filling in that box; not on building and securing the API."
- A principal technical architect in the financial services industry described the ease with which their team made changes with ForgeRock's CIAM solution. They said: "One of the first changes we asked ForgeRock to make was on Intelligent Access Trees. We sat down with them and said, 'This is great. This is awesome. But our customers need more than one authentication plan.' I don't want every single customer [going through the same journey], because that is not going to account for the twentysomething who just joined or a teen who just reached adulthood logging in [with] their parent's account, versus the 65-year-old who just wants to do business." With

- ForgeRock's CIAM solution, the interviewee's organization was able to build out and update identity journeys, optimizing customer experience.
- The same interviewee also noted that extensibility was a differentiator with ForgeRock. They said: "ForgeRock was willing to work with us and create Intelligent Access Trees that are extensible in such a way that we could wire up for our existing systems. So, we could one-by-one transition what we built into the industry standard. There's tremendous business value in that." As the landscape changes, ForgeRock enables companies to build out compliance capabilities such as tracking and data residency, which helps with compliance audits.
- A head of IAM from a telecommunications provider described ForgeRock Intelligent Access Trees as the only way to manage the user journey. They said: "[Using] the Intelligent Access Trees for policy framework the legacy permissions to manage the rights of all the new applications is the only concept that can meet the requirements of a complicated solution. If you have a portal, even just on the landing page, you have roughly 100 to 150 user data objects, and you need to decide whether the user has the rights at runtime for each one. ForgeRock Intelligent Access Trees are a great concept to do that."
- A principal security architect in the financial services industry explained: "Without ForgeRock's CIAM solution, we would have had to build a lot of security capabilities like state management and loss mitigation because of publicly exposed APIs and authentications. Right now, since we're undergoing the ForgeRock preauthentication process through the Intelligent Access Trees, we get all those benefits. We don't have to build any of it. We use ForgeRock [CIAM] out of the box. I don't have to build my own

SAML (security assertion markup language) or OAuth (open authorization) implementation. We're leveraging ForgeRock." With ForgeRock's CIAM solution, teams can also build out IAM security rules and handle any escalated support tickets.

Modeling and assumptions. To model the measurable impact of ForgeRock's CIAM solution on the composite organization's avoided development costs, Forrester applies the following assumptions:

 In order to replicate ForgeRock's capabilities and impact, the composite organization would need to hire 10 additional developer FTEs for one-year projects. The average salary of a developer is \$148,500.

Risks. The value of this benefit may depend on the following variables:

- The organization's existing capabilities and environment.
- The organization's needs to develop additional security, compliance, and identity journeys.

Results. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$1.3 million.

Avoid	led Development Costs				
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Avoided developer headcount (CIAM journeys and capabilities)	Composite	4	0	0
B2	Avoided developer headcount (compliance)	Composite	2	0	0
В3	Avoided developer headcount (security)	Composite	4	0	0
B4	Average salary of a developer	TEI Standard	\$148,500	\$148,500	\$148,500
Bt	Avoided development costs	(B1+B2+B3)*B4	\$1,485,000	\$0	\$0
	Risk adjustment	↓5%			
Btr	Avoided development costs (risk-adjusted)		\$1,410,750	\$0	\$0
	Three-year total: \$1,410,750	Three-year prese	ent value: \$1,282,500	ı	

CONTACT CENTER BENEFITS

Evidence and data. High friction in customer experience can result in lost revenue and wasted resources. Interviewees said that prior to using ForgeRock's CIAM solution, developers handled hundreds of tickets a day as there were high volumes of calls to the contact center related to security and passwords. After deployment of ForgeRock's CIAM solution, interviewees' organizations experienced reduced call volumes. Several interviewees credited ForgeRock's CIAM solution with improved customer

experience and journeys, including improved conversion rates, reduced login times, increases in customers who register for new products, increases in lifetime value, and increases in customer satisfaction.

 An executive director of IAM and product services in the telecommunications industry noted a stark decrease in service tickets after deploying ForgeRock's CIAM solution. They said: "Our total daily tickets that are escalated to our dev team dropped from about 100 [or more]

tickets per day to less than a handful per day. So, we knew that we were not getting more complaints, legitimate customers were not blocked, [and] fraudsters were blocked."

- A global head of secure access in the financial services industry described their company's approach with ForgeRock's CIAM solution to reducing call volume and duration like this: "We've got a product mindset on this one. We target the use cases and journeys with the highest call volumes. Cumulatively, we expect to chip away at these. We're seeing a 20% reduction of security-related calls globally, and we expect that to improve every year."
- A principal product manager in the health insurance industry described their team's approach this way: "Let the member log in to the portal for the very first time. From the second time onwards, let's just enable multifactor authentication. That's possible because we have these beautiful authentication journeys and Intelligent Access Trees with ForgeRock [CIAM]. That's where the ForgeRock technology really helped us in driving some of those costs down. Multifactor authentication failure was especially quite high when we enabled initially, but we quickly changed our user journeys to alter some

of these flows to not enforce multifactor authentication on the get-go."

Modeling and assumptions. To model the measurable impact of ForgeRock's CIAM solution on the composite organization's contact center benefits, Forrester applies the following assumptions:

- 10 million security and account-related calls reach the contact center per year.
- Each call cost averages \$10.
- With ForgeRock for CIAM, the composite organization experiences a 40% reduction in security-related calls after three years.
- 55% of this benefit is directly attributed to ForgeRock. The other 45% is attributed to organizational changes (in people and processes) to realize efficiency improvements.

Risks. The value of this benefit may depend on the following variables:

- Fluctuations in call volume due to new capabilities for new markets.
- The organization's existing self-service and password reset capabilities.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of \$23.9 million.

Conta	Contact Center Benefits								
Ref.	Metric	Source	Year 1	Year 2	Year 3				
C1	Number of security/account related calls at contact center	Composite	10,000,000	10,000,000	10,000,000				
C2	Average cost per call	Composite	\$10	\$10	\$10				
C3	Reduction in security-related calls with ForgeRock's CIAM solution	Composite	5%	20%	40%				
C4	ForgeRock's CIAM solution attribution	Composite	55%	55%	55%				
Ct	Contact center benefits	C1*C2*C3*C4	\$2,750,000	\$11,000,000	\$22,000,000				
	Risk adjustment	↓15%							
Ctr	Contact center benefits (risk-adjusted)		\$2,337,500	\$9,350,000	\$18,700,000				
	Three-year total: \$30,387,500		Three-year pres	sent value: \$23,901,8	60				



IMPROVED TIME-TO-VALUE FOR IAM UPDATES AND RELEASES

Evidence and data. All interviewees in the study reported that with ForgeRock's CIAM solution, teams found the process of setting up IAM for new applications and releases significantly easier. They said ForgeRock's CIAM solution additionally introduced ease to making changes and updating rules and flows and noted the ability to deploy updates globally immediately, rather than to one market or region.

- A global head of secure access in the financial services industry reported that their organization's release cadence has gone from five times a year to more than 25 times a year. The interviewee said: "We've developed new journeys for demanding markets in a more costeffective way than we would ever have been able to previously. Some of the overall budget for the smaller markets didn't allow for us to change the journey with our previous high costs. Now with ForgeRock [CIAM], partly through better data, we can take metrics from large, demanding markets and apply them to other markets. The combination of the data plus the technical architecture allows us to make those changes much more easily. We can bring value to markets that otherwise would not have gotten new journeys."
- A principal product manager in the healthcare industry said: "ForgeRock [CIAM] drastically reduced our time-to-market for new feature enablement. We now have quick turnarounds for any user enhancement requests, security gap fillings, or security limitations. I would estimate time-to-market has reduced by at least four or five times."

Modeling and assumptions. To model the measurable impact of ForgeRock's CIAM solution on the composite organization's improved time-to-value

for IAM updates and releases, Forrester applies the following assumptions:

- In its legacy environment, the composite organization planned 10 new releases per year, with a time-to-release of four weeks.
- With ForgeRock's CIAM solution as the single CIAM layer, the time-to-release is reduced to one week over three years.
- At \$14,432 of expected weekly revenue per release, the composite organization sees \$432,689 of improved time-to-value for scheduled releases.
- ForgeRock's CIAM solution enables 20 net-new releases annually after three years, producing \$750,000 in expected revenue per net-new release each year. The value of net-new projects enabled by ForgeRock's CIAM solution is \$4.5 million.
- 30% of this benefit is directly attributed to ForgeRock's CIAM solution. The other 70% is attributed to organizational changes in people and processes to realize efficiency improvements.

"In markets where we've gone live, we're very successful with ForgeRock. We have delighted customers, delighted colleagues."

Global head of secure access, financial services

Risks. The value of this benefit may depend on the following variables:

 The frequency and impact of the organization's new releases and updates. The organization's existing release schedule and the way IAM was integrated into development. **Results.** To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of \$5.9 million.

Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Number of planned new releases annually with legacy solution	Composite	10	10	10
D2	Time-to-release with legacy solution (weeks)	Composite	4	4	4
D3	Time-to-release with ForgeRock's CIAM solution (weeks)	Composite	3	2	1
D4	Time-to-release improvement	D2-D3	1	2	3
D5	Expected revenue per release	Composite	\$750,000	\$750,000	\$750,000
D6	Expected weekly revenue per release (rounded)	D5/52	\$14,423	\$14,423	\$14,423
D7	Subtotal: Improved time-to-value for scheduled releases	D1*D4*D6	\$144,230	\$288,460	\$432,690
D8	Number of net-new releases annually enabled by ForgeRock's CIAM solution	Composite	5	10	20
D9	Expected revenue per net-new release	Composite	\$750,000	\$750,000	\$750,000
D10	Attribution to ForgeRock's CIAM solution	Composite	30%	30%	30%
D11	Subtotal: Value of net-new projects/releases enabled by ForgeRock's CIAM solution	D8*D9*D10	\$1,125,000	\$2,250,000	\$4,500,000
Dt	Improved time-to-value for IAM updates/releases	D7+D11	\$1,269,230	\$2,538,460	\$4,932,690
	Risk adjustment	↓15%			
Otr	Improved time-to-value for IAM updates/releases (risk-adjusted)		\$1,078,846	\$2,157,691	\$4,192,787
	Three-year total: \$7,429,323		Three-year pres	sent value: \$5,914,08	37

FRAUD IMPACT REDUCTION

Evidence and data. ForgeRock's CIAM solution has out-of-the-box tools that enable organizations to detect and prevent fraud in a number of ways.

Additionally, through the use of ForgeRock's trusted partner networks, interviewees' organizations gained access to additional easy-to-deploy solutions that could have an immediate impact. In one notable use case, an executive director of IAM and product services in the telecommunications industry recounted that in their organization's prior state, the company needed to turn off its fraud control during

large sales events. They said: "While we tried planned capacity, we couldn't handle 120% of the typical average day without our website going down. So, prior to ForgeRock [CIAM], we used to turn off our legacy access control services. That meant we would get a significantly higher number of fraudulent orders. Then we would comb through those during the provisioning phase of the order to try to cancel what we suspected was fraudulent." The interviewee said with ForgeRock's CIAM solution, there were no performance concerns and the company layered risk scoring up-front.

- The executive director of IAM and product services said, "The number of fraudulent orders over time were significantly reduced with tens of millions of dollars in fraud prevention per year."
- Interviewees' organizations were also able to leverage ForgeRock Intelligent Access Trees to build authentication journeys that automatically screened or flagged fraudulent behavior from customers and any internal employees who were supporting those customers.

Modeling and assumptions. To model the measurable impact of ForgeRock's CIAM solution on the composite organization's fraud impact reduction, Forrester applies the following assumptions:

 The composite organization experiences a reduction in fraud-related costs (e.g.,

- reimbursements and fraudulent orders) amounting to \$15 million after three years.
- 25% of this benefit is directly attributed to ForgeRock's CIAM solution. The other 75% is attributed to organizational changes in people and processes to realize efficiency improvements.

Risks. The value of this benefit may depend on the following variables:

- The organization's existing fraud detection and prevention capabilities.
- The organization's amount of fraudulent activity.

Results. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$4.7 million.

Frauc	Fraud Impact Reduction								
Ref.	Metric	Source	Year 1	Year 2	Year 3				
E1	Reduction in fraud-related costs (e.g., reimbursements, fraudulent orders, etc.)	Composite	\$2,000,000	\$8,000,000	\$15,000,000				
E2	Attribution to ForgeRock's CIAM solution	Composite	25%	25%	25%				
Et	Fraud impact reduction	E1*E2	\$500,000	\$2,000,000	\$3,750,000				
	Risk adjustment	↓5%							
Etr	Fraud impact reduction (risk-adjusted)		\$475,000	\$1,900,000	\$3,562,500				
	Three-year total: \$5,937,500		Three-year present value: \$4,678,625						



FLEXIBILITY

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

- transformation efforts. Interviewees' organizations used ForgeRock's CIAM solution to update and modernize their CIAM capabilities while the organizations at large went through digitization and modernization efforts, removing or limiting on-premises infrastructure and working to take advantage of cloud-based products and services. Interviewees reported that ForgeRock is a valuable partner for their organizations as they transition off legacy tools and that ForgeRock has helped bridge the gap between delivering new and modern experiences to customers while still modernizing back-end infrastructure.
- Potential additional cost savings from cloud migration. The composite organization used in this study is undergoing a digital transformation and has migrated some of its existing onpremises infrastructure to the cloud. According to Forrester, organizations that fully deploy IAM infrastructure in the cloud could experience even greater cost savings. Organizations moving to a cloud-based Identity as-a-Service platform can experience up to 80% additional savings on legacy infrastructure.³
- ensure they will be ready when new capabilities, features, or market demands arise. Interviewees said ForgeRock's intuitive Intelligent Access Trees and having the ability to create a single customer identity across channels allowed their organizations to deliver great experiences to customers and positioned them to be able to embrace and get ahead of shifts in consumer preference and security best practices.

A global head of secure access in the financial services industry shared: "We've seen accelerated new customers because we've also integrated ForgeRock [CIAM] into the onboarding journeys. So, we've seen increase in the proportion of customers who are registered for digital. We know from other data that customers registered for digital and [who are] engaged are higher value. They stick around [and] they tend to get more products. They tend to be better uses of our services and form better relationships. As we drive more and more of our new customers through low-friction journeys to get registered for digital, we're seeing them continue to be engaged."

"ForgeRock has been really good in its support model. The customer success mindset is one that ForgeRock adopted early, then lived it, breathed it, and lent it to us. [ForgeRock] helped us make decisions, steered us away from poor decisions, and accommodated our good decisions."

Global head of secure access, financial services

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

Analysis Of Costs

Quantified cost data as applied to the composite

Total	Total Costs									
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value			
Ftr	Implementation costs	\$2,801,400	\$2,043,550	\$1,285,700	\$700,350	\$6,831,000	\$6,247,918			
Gtr	Licensing and maintenance costs	\$315,000	\$1,312,500	\$3,937,500	\$5,775,000	\$11,340,000	\$9,101,157			
	Total costs (risk- adjusted)	\$3,116,400	\$3,356,050	\$5,223,200	\$6,475,350	\$18,171,000	\$15,349,075			

IMPLEMENTATION COSTS

Evidence and data. Interviewees' organizations leveraged both professional services and internal resources to deploy ForgeRock's CIAM solution, often migrating a subset of applications as a test case before moving to more critical applications.

- Prior to using ForgeRock's CIAM solution, interviewees' organizations spent considerable money and resources maintaining disparate legacy systems that were not well-integrated and lacked needed capabilities.
- Interviewees reported that the ForgeRock's CIAM solution deployment aligned with their expectations and that integrating new and existing applications became easier as teams became more familiar with ForgeRock's CIAM solution and its capabilities.
- Interviewees' organizations took phased approaches: They onboarded a group of applications in Year 1 and streamlined experiences and introduced new capabilities to that segment before expanding to cover the majority of their customers by Year 3.

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

- The composite leverages professional services as well as a group of 20 internal CIAM FTEs for the deployment. The organization requires fewer resources per year as more applications are onboarded and as internal resources become more experienced with ForgeRock's CIAM solution.
- There are some infrastructure costs associated with the deployment including VMs for webbased applications and servers to support onpremises.
- The average burdened salary for an internal deployment team member is \$114,750.

Risks. The impact of these costs may vary due to:

- The organization's legacy environment prior to deploying ForgeRock's CIAM solution.
- The organization's speed and capability requirements.

Results. To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$6.2 million.

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Imple	ementation Costs					
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Professional services (training and deployment)	Composite	\$200,000	\$200,000	\$100,000	\$100,000
F2	IAM deployment team	Composite	20	20	20	20
F3	Time dedicated to ForgeRock's CIAM solution deployment and application onboarding	Composite	80%	60%	40%	20%
F4	Infrastructure costs	Composite	\$400,000	\$200,000	\$100,000	\$50,000
F5	Average salary of IAM deployment team member	A5	\$114,750	\$114,750	\$114,750	\$114,750
Ft	Implementation costs	F1+F4+(F2*F3*F 5)	\$2,436,000	\$1,777,000	\$1,118,000	\$609,000
	Risk adjustment	↑15%				
Ftr	Implementation costs (risk-adjusted)		\$2,801,400	\$2,043,550	\$1,285,700	\$700,350
	Three-year total: \$6,831,000			nree-year present	value: \$6,247,918	

LICENSING AND MAINTENANCE COSTS

Evidence and data. Interviewees' organizations negotiated per-identity pricing based on volume and usage characteristics.

- Interviewees noted that prior to using ForgeRock's CIAM solution, they were paying multiple vendors and incurred large, ongoing internal costs to support and maintain their CIAM infrastructures and tools.
- With ForgeRock's CIAM solution, interviewees' organizations have predictable monthly costs that are cheaper than what they previously paid for legacy solutions.
- Interviewees reported that by purchasing
 ForgeRock's cloud license, their organizations
 were still given access to ForgeRock's software
 to support on-premises applications as they
 needed to support their current infrastructures
 while facilitating a move off on-premises
 infrastructure into the cloud.

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

- The composite negotiates a per-identity price based on volume and usage.
- There are ongoing support costs to maintain the solution, to add enhancements, and to keep any ForgeRock-related infrastructure up to date.
 These costs increase over time in this model as a greater percentage of applications are migrated to ForgeRock. Ongoing support costs are expected to cap at Year 3 when the composite organization is fully deployed on ForgeRock.
- Pricing may vary. Contact ForgeRock for additional details.

Risks. The impact of these costs may vary due to:

- The organization's volume.
- The complexity of the organization's legacy and updated infrastructures.

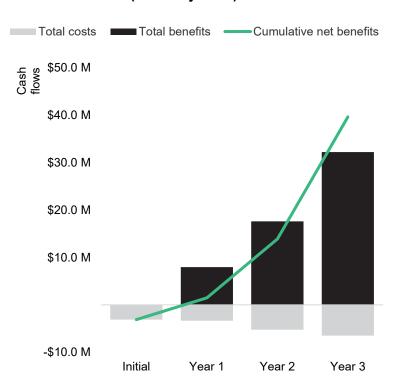
Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of \$9.1 million.

Licer	Licensing And Maintenance Costs							
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3		
G1	ForgeRock's CIAM solution licensing costs	Composite	\$300,000	\$750,000	\$3,000,000	\$4,500,000		
G2	Ongoing support costs (costs expected to cap at Year 3)	Composite	\$0	\$500,000	\$750,000	\$1,000,000		
Gt	Licensing and maintenance costs	G1+G2	\$300,000	\$1,250,000	\$3,750,000	\$5,500,000		
	Risk adjustment	↑5%						
Gtr	Licensing and maintenance costs (risk-adjusted)		\$315,000	\$1,312,500	\$3,937,500	\$5,775,000		
	Three-year total: \$11,340,000			Three-year present value: \$9,101,157				

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	(\$3,116,400)	(\$3,356,050)	(\$5,223,200)	(\$6,475,350)	(\$18,171,000)	(\$15,349,075)
Total benefits	\$0	\$7,515,196	\$16,727,341	\$30,881,487	\$55,124,023	\$43,857,963
Net benefits	(\$3,116,400)	\$4,159,146	\$11,504,141	\$24,406,137	\$36,953,023	\$28,508,888
ROI						186%
Payback						9 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 12%.



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: Supplemental Material

"Best Practices: Customer Identity And Access Management," Forrester Research, Inc., August 2, 2021

"The Future Of Identity And Access Management," Forrester Research, Inc., August 2, 2021

"Forrester's Identity And Access Management Maturity Assessment," Forrester Research, Inc., June 11, 2021

"Forrester's Customer IAM Security Maturity Assessment Model," Forrester Research, Inc., December 12, 2016

Appendix C: 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 Net Promoter, NPS, and the NPS-related emoticons are registered U.S. trademarks, and Net Promoter Score and Net Promoter System are service marks, of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld.

³ Source: "Making The Business Case For Identity And Access Management," Forrester Research, Inc., July 22, 2021.

