FORRESTER[°]

The Total Economic Impact™ Of Ada

Cost Savings And Business Benefits Enabled By Ada

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ABOUT FORRESTER CONSULTING

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Executive Summary

Delivering on brand promise through valuable customer interactions is ever more critical to driving new growth and customer loyalty. Higher-quality experiences can also mean fewer customer issues to resolve, translating into fewer calls to customer care and a subsequent reduction in call-center costs. To execute high-quality digital experiences well, customer-obsessed organizations must invest in the right technology, training, and services.

Ada is a conversational AI platform built for customer support. Ada automates customer interactions to answer frequently asked questions, retrieve context to resolve issues and drive action, gain customer and product insights, and deliver a personalized customer experience. With a no-code platform and a usagebased cost structure, Ada offers a scalable approach to expanding operations, cutting unit costs, and advancing quality customer interactions.

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

To better understand this investment's benefits, costs, and risks Forrester interviewed seven representatives with experience using Ada across six organizations. For this study, Forrester aggregated the interviewees' experiences and combined the results into a single <u>composite organization</u> that is a

Contact-center cost savings

15%





global organization with 10,000 employees, 2 million customers, and revenue of \$3 billion per year.

Prior to using Ada, these interviewees' organizations lacked cost-effective solutions to service digital interactions with customers and employees. Prior solutions resulted in failed integrations with legacy, out-of-the-box solutions or slow and costly developer backlogs to service homegrown bot solutions. These limitations stood in the way of cutting contact-center costs, caused revenue leakage during promotions, and resulted in suboptimal bot deployment.

After the investment in Ada, the interviewees' organizations established a robust and easy-tomanage conversational AI platform that automated customer-support interactions and enhanced organizational flexibility. Key results from the investment include reductions in contact-center and developer costs, quicker time to market, increased customer engagement, and improved revenue opportunities.

KEY FINDINGS

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

- 15% reduction in contact volume for savings of \$13.3 million over three years. As customers find the support they need with improved virtual interactions through Ada, fewer inquiries are duplicated and escalated across other, more costly contact channels and interviewees' organizations were able to increase their capacity to service more customer interactions. The composite organization is able to completely eliminate the web-contact channel, while reducing all other channel volumes in favor of automated brand interactions with Ada.
- Shortened first-response time with Ada yielding efficiencies of \$1.4 million. Ada decreases an agent's chat first-response time by 75% at the end of the composite's three-year investment. This impact is realized across the organization according to the product lines to which it is scaled.
- DevOps time savings from Ada's low-code platform totaling nearly \$725,000. The composite organization drastically reduces the amount of time and energy required from developers as the design, build, and test effort shifts to business process experts and botdedicated resources. In addition to saving costly developer time, the shift to Ada provides the organization with a configurable platform to integrate customer feedback into product offerings.

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

- Improved customer satisfaction metrics, leading to increased revenue opportunities.
 With Ada strategically deployed, interviewees' organizations increased customer revenue from improved conversion, cross-selling, and upselling opportunities. Interviewees also discussed a stronger and more aligned voice of the customer gleaned from Ada conversation analytics leading to improved customer experiences overall.
- Increased time to value both externally for customers and internally for product lines using Ada. Interviewees noted several ways in which Ada decreased customer effort, speeding up customer time to value. Furthermore, interviewees noted that the low-code platform allowed their organizations to release new and improved products faster.
- Improved employee experience by moderating the nature and volume of customer inquiries while improving their toolsets. Interviewees offered examples of how Ada's intelligent routing provided process efficiencies and improvements to handling sensitive communications with matters such as health and safety as well as fraud.
- Valued partnership with Ada. From initial deployment services to ongoing technical guidance, the interviewees expressed trust in Ada's technical capabilities and authenticity.
- Flexible ways to further leverage an organization's existing Ada investment.
 Interviewees noted many future use cases for Ada. They also listed ways in which Ada-derived customer insights could help their organizations develop new and improved products and gain better visibility by leaning more into Ada's reporting capabilities.

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

- Ada subscription and professional services fees of just over \$2 million over three years.
 Pricing is largely a function of annual bot usage.
 The composite organization's bot-interaction volume is driven by the number of product lines in which Ada is deployed for automated interactions. The composite organization also deploys Ada professional services early in the three-year period.
- Internal bot deployment and maintenance costs totaling approximately \$680,000. As the composite deploys Ada across the organization, it dedicates a bot program manager to oversee bot administration across the company and bot specialists to build and maintain the bot. It dedicates additional internal business process specialists to inform the successive, product-linespecific, iterative deployments of Ada.
- Change management authentication and integration costs of \$264,000. To oversee the broader CX change-management efforts in which Ada plays a central role, the composite organization partially dedicates an internal executive. CX agents are fully trained on Ada by Year 1, with additional agent resource hours dedicated to change management. Authentication and integration costs relate to the number of developer and security engineer hours needed for successive integrations as Ada is deployed across business lines and for the authentication phase in Year 2.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$15.42 million over three years versus costs of \$3.04 million, adding up to a net present value (NPV) of \$12.39 million and an ROI of 408%.





"Ada helps us move eminently faster. We really are impressed with how quickly [we're] able to build a complicated new flow in an easy-touse builder."

 Director of support product technology, consumer products

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 Ada.

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 Ada can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Ada 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 Ada.

Ada 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.

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



DUE DILIGENCE

Interviewed Ada stakeholders and Forrester analysts to gather data relative to Ada.



INTERVIEWS

Interviewed seven representatives at organizations using Ada 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 Ada Customer Journey

Drivers leading to the Ada investment

Interviews			
Role	Region	Industry	Interactions
	California headquarters	Technology	Post-sales
	Global reach	B2C	500,000
Director of support	New York headquarters	Consumer products	Post-sales
product and technology	Global reach	D2C	400,000
Vice president of CX management	Philippines headquarters	Fintech: payments	Customer contact routing
CX strategy and innovations head	Philippines with some international transactions	B2C and C2C	4 million
Customer experience	Arizona headquarters	Internet service provider	Post-sales
manager	Reach spanning more than 20 states	B2B and B2C	2.5 million
Manager of digital	San Francisco, Calif., US	Fintech	Post-sales, cross-sell, upsell
communications	Global reach but with ADA, it's all US-based	B2C	1.25 million
Vice president of	Toronto, Ontario, Canada headquarters	Retail and payments	Vendor management and financial services
customer support	National reach	B2C, C2C	1 million

KEY CHALLENGES

Before Ada, interviewees' organizations faced opportunities to scale their businesses, but high operational and capital expenditures hampered their abilities to expand into their growth potential.

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

- Inadequate prior solutions to automate brand interactions. Most interviewees' organizations had attempted to service interactions with automated solutions, whether developed by inhouse engineering resources or through out-ofthe-box features of the incumbent contactsupport solution.
 - The director of support product and technology in the consumer products

industry shared that their organization's support team was using a chat widget built into its contact-support solution. This prior solution did not have the functionality needed, such as reporting on bot engagement, bot satisfaction, or customer outcomes.

The program manager at the technology company reported that her organization developed a homegrown AI bot integrated with the company tech stack. It was built and managed out of engineering. The UI was not business-friendly and caused a lack of flexibility for business owners to be able to quickly add and modify bot flows. It further lacked the ability to integrate with other areas of the business or other platforms.

- The manager of digital communications in the fintech industry said their company used a chat widget also built into a contact support solution. They said: "It was basically a targeted help center more so than a real chatbot."
- Costly legacy environments that would not scale to meet growth expectations. Several interviewees indicated that their organizations were experiencing unprecedented growth in volumes that were not cost-effective for current contact channel structures.
 - The manager of digital communications at the fintech company said their organization's prior environment had lessefficient unit costs in face of massive growth and inconsistency with promotional efforts through live agents.
 - The director of support product and technology in the consumer products industry noted difficulty and wasted resources with their organization's prior solution. They said: "We tried to integrate it three times, and they all failed."
 - The customer experience manager for an internet service provider indicated that their organization lacked the resources to continue to manage the chat widget built into its contact-support solution.
 - The vice president of CX management and the CX strategy and innovations head at a fintech payments organization described the company's methods for customer engagement in its prior environment as tickets and e-mails routed through an online support inquiry form. They said: "There was no big incident that

happened. We needed innovation and to scale while managing costs effectively."

- Siloed, decentralized processes for core business functions. Interviewees' organizations deployed Ada as a solution across several vital business functions. Prior to Ada, these functions were poorly integrated, required duplicative operational efforts, and were often highly manual and therefore slower and more prone to error.
 - The vice president of customer support at the retail and payments company said their organization didn't have a bot in its prior environment. They described a lack of harmony in administering contact centers across the organization, with multiple methods of vendor management and contract management depending on the business unit, resulting in inconsistent customer experiences.
 - The director of support product and technology in consumer products explained that their organization had inconsistent outcomes with marketing promotions in its prior environment. They said: "We would have a marketing promotion and train the entire customerservice team. It led to people giving away more money or the wrong amount of money to somebody who wasn't eligible."

"We had a chatbot service through our live chat program, but it had to be self-managed and we didn't have the resources."

Customer experience manager, internet service provider

SOLUTION REQUIREMENTS

The interviewees' organizations searched for a solution that could:

- Support growth and innovation at large scale. Several interviewees' organizations experienced massive growth in the past several years and needed to reduce their costs of operations while continuing to expand their operational reaches, product lines, and revenues.
 - The vice president of CX management and the CX strategy and innovations head in the fintech payments industry said their company needed a solution that could support rapid growth. They were looking for innovation at scale to manage costs effectively with a low-code environment.
 - The manager of digital communications at the fintech company said their organization required better unit economics while maintaining a positive customer experience. With the solution, the organization also sought to gain insights from customer interaction data to help boost conversions.
 - The program manager at the technology company said that coming away from a previous engineering-heavy environment, business users' day-to-day autonomy over bot operations was needed.

Meet customer preferences and expectations regarding digital experiences. With customer satisfaction a key driver in growth, interviewees' organizations understood the need to grow the number and agility of their engagement channels to align with consumer preferences

.

In light of the rapid growth noted above, the vice president of CX management and the CX strategy and innovations head at the fintech payments company recognized the need to still transact naturally with customers while reducing costs. They stated that their organization needed to have "the proper channel in which the customer should be served, according to their preference [and] according to the type of concern that they are experiencing."

"We needed a clear line of sight [and] clear visibility across the enterprise of our spend across servicing consistent contract management."

Vice president of customer support, retail and payments

WHY ADA?

In reviewing the landscape of potential providers, interviewees indicated that Ada emerged as an industry leader. Their organizations selected Ada as their automated brand interaction platform because of its technical capabilities and its ability to deliver quality brand interactions grounded in the voice of the customer. The interviewees' organizations searched for a solution with:

- Robust technical capabilities. Multiple interviewees pointed to the competitive advantage of Ada compared to their organization's in-house capabilities to build a bot of a similar caliber.
 - The program manager in the technology industry liked Ada for its approach to conversational AI, natural language processing (NLP), bot training, integrations, configurability, and analytics.
 - The director of support product and technology at the consumer products company appreciated Ada's out-of-thebox integration with its incumbent contact support system, which could work with multiple channels besides web chat. Another selling point was Ada's autonomous training and data dips into a knowledge base to offer self-service.
- Efficient but effective brand interactions. Several interviewees' organizations selected Ada as its automated brand interaction platform because of Ada's ability to meet customers where they are, and its capacity to capture the voice of the customer through conversational analysis.
 - The customer experience manager for an internet service provider saw that Ada reduced need for live agent support while providing more support options for customers to meet their preferences.

THE CONVERSATIONAL AI BOT JOURNEY

Customer interactions span all touchpoints, but not all are created equally. Forrester describes customer experience as "the perception that people have about their interactions with your company."² These live or asynchronous customer interactions can be self-service, automated, or person-to-person.



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Well-designed interaction flows in automated engagement platforms can harness customer insights and reduce the cost and complexity of valuable inperson resources. Furthermore, they:

Align with broad customer preferences for support resolution. Eighty-one percent of all customers across industries attempt to resolve their inquiries themselves through self-service channels before reaching out to a live representative.³

Provide a more cost-effective contact channel. While the cost of an individual automated brand interaction may amount to just pennies, the average cost of a live service interaction (e.g., phone, e-mail, or webchat) is more than \$7 for a B2C company and more than \$13 for a B2B company.⁴

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 six 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, multibilliondollar B2C organization provides high-volume sales and customer support. The composite organization has a strong brand, a large customer base of about 20 million customers, and a strong online and offline presence. Out of 10,000 employees, there are 100 customer-support agents, including a mix of part-time and seasonal resources.

Prior to using Ada, the composite organization developed a conversational AI bot to service interactions with customers seeking support. It offered three main agent-supported channels: agent phone contact, agent chat contact, and asynchronous agent web form/email contact. Ultimately, the composite intends to use Ada to replace the asynchronous agent web form/email contact channel while further reducing agent chat volume.

Deployment characteristics. The composite organization deploys Ada in an agile, land-andexpand fashion with a brief, early deployment period of six months. Subsequent build cycles for other product lines are developed within a two-week sprint.

- In Year 1, the composite tests deployment of the platform with one business unit and rolls it out to three more by the end of Year 1.
- This increases to six product lines with Ada deployed in Year 2.
- Ten product lines and business units are integrated in Ada by the end of Year 3, representing the vast majority of the composite organization.

 All 10 major product lines have Ada deployed with use cases specific to the product, and the build for which is informed by relevant business process experts.

The initial use case for Ada is to develop a most viable product (MVP) for an interactive, self-service experience that is the first point of contact for customer support.

- The composite organization starts with one use case for one product line in the initial period. It develops 20 initial customer contact flows and deploys this MVP Ada bot to the customer front lines. More flows are added while existing flows are refined with customer data ingested by Ada.
- In Year 1, the composite organization proceeds to integrate Ada with its single sign-on authentication solution. This provides agents with faster access to more relevant information to service customer inquiries while also reducing the level of effort required by customers.
- In Year 2, the composite organization introduces authentication flows with supporting integrations.

Key Assumptions

- \$3 billion annual revenue
- 100 CX agents
- 10 product lines in Ada by Year 3

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	Reduced agent contact volume	\$2,214,000	\$5,076,000	\$9,450,000	\$16,740,000	\$13,307,693	
Btr	Shortened first-response time	\$280,800	\$554,400	\$900,000	\$1,735,200	\$1,389,638	
Ctr	Developer time savings from low-code platform	\$143,091	\$286,183	\$476,971	\$906,246	\$724,954	
	Total benefits (risk-adjusted)	\$2,637,891	\$5,916,583	\$10,826,971	\$19,381,446	\$15,422,285	

REDUCED AGENT CONTACT VOLUME

Evidence and data. Interviewees noted the cascading impacts of reduced contact-center volumes with Ada as a first support channel of contact. Ada was often first deployed as part of an effort to improve low-cost, self-service resources for customers. Simple inquiries saw a higher resolution rate, diminishing the volume of simpler flows to higher-cost, agent-supported channels.

- Ada's improvements to self-service resolution rates measurably decreased contact center costs. The manager of digital communications at the fintech company pointed out the dynamic impact on containment rates. They said: "It creates an interesting environment where you're always going to be moving forward [and] using the insights that you get to solve the incoming inquiries to then push that feedback back into the product and make product improvements."
 - Ada improved customers' abilities to resolve their own inquiries. The customer experience manager with the internet service provider said that with Ada, their organization increased selfservice troubleshooting utilization and decreased capital expenditures to technical care teams for standard, troubleshooting, and basic support. The director of support product and technology at

the consumer products company said: "About 400,000 conversations have been self-serviced since launching. We changed our contact strategy to route more volume to Ada because it's been so successful."

Modeling and assumptions. Forrester assumes the following about the composite organization:

- The composite deploys Ada as the first point of customer contact. This facilitates faster selfservice resolution, combining with intelligent routing of remaining inquiries to the appropriate channel, lowers contact-center volumes.
- Before Ada, the composite's annual agent contact volume was as follows:

"With Ada, we ended up with a 15% reduction in overall support volume. It's the most successful cost savings initiative we've ever had in the support area."

Director of support product and technology, consumer products

- 2,000,000 agent phone contacts at \$10 per interaction.
- 1 million agent chat contacts at \$8 per interaction.
- 2 million agent web contacts at \$6 per interaction.
- With Ada, the composite organization decreases annual agent contact volumes across all channels with the immediate deployment of the Ada MVP, and further impacts are felt after Year 2 once all Ada users are authenticated.
 - This reduces agent phone contact volume by 20% in Year 1, ramping up to 25% reductions in Year 3.
 - It lowers agent chat contact volume by 35% in Year 1 to half in Year 3.
 - It reduces agent chat web volume by 80% in Year 1. By Year 3, the composite organization completely decommissions its web contact channel.
- Ada's overall impact across the organization is a function of the number of product lines to which it is scaled. Thirty percent of the composite organization's product lines have Ada in Year 1, 60% of product lines have Ada by Year 2, and Ada is scaled across all major product lines by the end of Year 3.
- Considering the organization wide CX transformation effort, the composite organization attributes 50% of the benefit to Ada.

Risks. The impact of this benefit will vary by organization based on the following factors:

 Industry and geography both impact customer appetite for messaging and chat channels. These factors will also influence agent hourly rates and other typical costs of support, including whether support agents are full-time employees or outsourced resources. Market conditions (including from the COVID-19 pandemic) can drive drastic call behavior and volume changes.

- Contact center channels, volumes, and operations before the investment in Ada will determine the percentage of overall contacts that are initially routed through phone channels. If the organization has no existing messaging functionality, a higher volume of overall contacts will be routed through phone channels in the prior environment.
- The volume of messages fully automated through chatbots depends on the amount of time and resources dedicated to the initial routing instructions and ongoing development and improvement of these capabilities. Breadth, depth, and quality of resources impact costs.
- The level of process, contact flow, and interactive voice response (IVR) redesign undertaken while deploying Ada, and overestimating or underestimating the number of contacts for each channel will further affect results.
- The organization might also decide to utilize agent productivity gains to reallocate phone agents to other value-add activities, including more complicated phone interactions or upskilling to operate on the messaging side as well. These factors will affect opportunities for reduced contact volumes.

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 \$13.3 million.

"Anybody at scale really needs to be focusing on self-serve."

Manager of digital communications, fintech

Redu	ced Agent Contact Volume				
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Agent phone contact volume before Ada	Composite	2,000,000	2,000,000	2,000,000
A2	Reduction in agent phone contact volume with Ada	Interviews	20%	22%	25%
A3	Agent phone contact cost per interaction	Composite	\$10	\$10	\$10
A4	Agent chat contact volume before Ada	Composite	1,000,000	1,000,000	1,000,000
A5	Reduction in agent chat contact volume with Ada	Interviews	35%	45%	50%
A6	Agent chat cost per interaction	Composite	\$8	\$8	\$8
A7	Agent web contact volume before Ada	Composite	2,000,000	2,000,000	2,000,000
A8	Reduction in Agent web contact volume with Ada	Interviews	80%	90%	100%
A9	Agent web contact cost per interaction	Composite	\$6	\$6	\$6
A10	Percentage of conversations regarding product lines covered by Ada	Composite	30%	60%	100%
A11	Attribution to Ada	Composite	50%	50%	50%
At	Reduced agent contact volume	(A1*A2*A3)+(A4* A5*A6)+(A7*A8*A 9)*A10*A11	\$2,460,000	\$5,640,000	\$10,500,000
	Risk adjustment	↓10%			
Atr	Reduced agent contact volume (risk- adjusted)		\$2,214,000	\$5,076,000	\$9,450,000
	Three-year total: \$16,740,000		Three-yea	ar present value: \$13,3	807,693

SHORTENED FIRST-RESPONSE TIME

Evidence and data. As customers increasingly resolve their issues with self-service resources, lower call volumes also decrease first-response time. Furthermore, with easy access to critical customer information in real time, the organizations can design more automated, efficient, and effective processes to route customers to their preferred contact channel.

 Ada-authenticated conversations linked relevant and helpful customer data, reducing the amount of agent effort needed before every contact. The vice president of CX management and the CX strategy and innovations head at the fintech payments company both described how their organization was able to automate a portion of the inquiry process done by agents in the prior environment. They stated: "With Ada in place, we are able to quickly communicate with our customers. From the moment that the customer goes into the system, in that next 2 minutes, they get a response from our agents on the front line."

The program manager at the technology company also noted Ada's quick impact. They said: "Ada really gives us the flexibility to meet the customer's need and sometimes within minutes within the same day. We can alleviate some of the pain that was directed our way without customers having to talk to the agents directly."

Decreased first-response time





"If we know that you're a hightrust customer, we just allow you work in the bot where you can submit disputes yourself, which saves operational costs."

Manager of digital communications, fintech

Modeling and assumptions. With Ada's faster selfservice resolution, the composite organization lowers contact center volumes as follows:

- Agent chat contact first-response time before Ada was 20 minutes.
- Ada reduces web chat first-response time by 60% in Year 1, by 70% in Year 2, and by 75% at the end of Year 3.
- Ada's overall impact across the organization is a function of the number of product lines to which it is scaled. Thirty percent of the composite organization's product lines have Ada in Year 1, 60 percent of product lines have Ada by Year 2, and Ada is scaled across all major product lines by the end of Year 3.

Risks. Forrester recognizes that these results may not be representative of all experiences and the cost will vary depending on the following factors.

- Baseline first-response times will vary by organization and by channel type, including the level of wasted time before first response with the legacy environment.
- The deployed Ada use cases will dictate the level of process, contact flow, and IVR redesign undertaken, as will investments in integrations, automations, and process improvements to

simplify agent tasks and improve insights in advance of live responses from agents.

- Market volatility (like that due to the pandemic) can drive drastic variability in call behavior and volume.
- Internal talent, training, and adoption of Ada, as well as the level of customization to the user interface may impact this benefit.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$1.4 million.

"People are typing in questions all day long into the bot and it's all customer data."

Program manager, technology

Shor	tened First-Response Time				
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	First-response time before Ada, in minutes	Composite	20	20	20
B2	Reduction in first-response time with Ada	Interviews	60%	70%	75%
B3	Agent chat contact volume after Ada	A4*(1-A5)	650,000	550,000	500,000
B4	Percentage of conversations regarding product lines covered by Ada	A10	30%	60%	100%
Bt	Shortened first-response time	A6*B1*B2*B3	\$312,000	\$616,000	\$1,000,000
	Risk adjustment	↓10%			
Btr	Shortened first-response time (risk- adjusted)		\$280,800	\$554,400	\$900,000
	Three-vear total: \$1,735.200		Three-ve	ear present value: \$1.3	89.638

DEVELOPER TIME SAVINGS FROM LOW-CODE PLATFORM

Evidence and data. Interviewees said Ada's lowcode platform simplified the build-out and maintenance of a conversational AI platform compared to similar efforts undertaken in their organizations' prior environments.

- Organizations that previously relied heavily on developers were able to shift the effort to lower-cost resources closer to the customer.
 Before Ada, the program manager at the technology company lamented the rigid, inefficient process related to the home-grown bot in the prior environment. She shared: "To modify every single thing, like being able to create or update a new flow within the bot, we had to include engineering. Now, that's all built-in within Ada and that's a huge win."
- Ada's low-code platform facilitated product improvements and flexible release cycles. The vice president of CX management and the CX strategy and innovations head at the fintechpayments company expressed that "Having a platform that is sitting in a low-code environment allows businesses to really progress without the comprehensive assistance from our tech teams. We integrated Ada into our ticketing platform and that API is already included so we just have to call and configure it."

"There's a lot of flexibility we get with Ada, and a lot of things we can do without having to depend on engineering teams for the most part."

Program manager, technology

Modeling and assumptions. Forrester assumes the following about the composite organization:

- As day-to-day bot-related effort shifts to bot specialists, the composite organization reduces the amount of developer resource hours needed to design, build, and test bot functionality.
- Before Ada, the composite had a homegrown bot. Four DevOps resources were dedicated to bot build and changes, which were handled through a ticketing system. The fully burdened hourly developer rate is \$64.
- Efficiencies are derived from the reduced number of resources needed total and the lower hourly rate for resources now managing bot efforts (see Cost E).
- With Ada, DevOps is still involved at key points in the bot build and integration and authentication process (see Cost F). As Ada scales to new product lines across the organization, it reduces the reliance on developer resources by 99%.
- Forrester assumes a productivity recapture for each end user of 50% as not all regained hours may be used productively

Risks. Forrester recognizes that these results may not be representative of all experiences and the cost will vary depending on the following factors.

- The technology landscape for conversational AI functionality prior to Ada, in terms of number and type of legacy technology being replaced (e.g., homegrown, third-party, or prior Ada solution) as well as the cost associated with maintaining them are key benefit drivers. The rate at which legacy solutions are decommissioned and the length of deployment time could impact the level and timing of savings.
- The level of customization to the user interface and the degree of integration with other IT systems will impact the need for developer resources with Ada.

 The level of staffing and average salary for bot program manager and bot specialists will impact savings against legacy environments relying on developer resources. **Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$725,000.

Developer Time Savings From Low-Code Platform

Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	DevOps hours dedicated to bot management before Ada	4 FTEs* 2,080 hours	8,320	8,320	8,320
C2	DevOps fully burdened hourly rate	Composite	\$64	\$64	\$64
C3	Reduction in DevOps with Ada's low code platform administration	((C1*C2)-(F7*F8))/C1*C2	99%	99%	99%
C4	Percentage of conversations regarding product lines covered by Ada	A10	30%	60%	100%
C5	Productivity capture	Composite	50%	50%	50%
Ct	Developer time savings from low-code environment	C1*C2*C3	\$158,990	\$317,981	\$529,968
	Risk adjustment	↓10%			
Ctr	DevOps time savings from low-code platform (risk-adjusted)		\$143,091	\$286,183	\$476,971
	Three-year total: \$906,246		Three-y	ear present value: \$72	4,954

UNQUANTIFIED BENEFITS

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

- Stronger and more aligned voice of the customer. In many cases, interviewees found that customers preferred self-service over other channels. Deploying and refining Ada yielded insights that, when injected back into the bot, further improved alignment with customer selfservice resources.
 - The vice president of CX management and the CX strategy and innovations head at the fintech payments company noted that as their organization transitioned, it was able to stabilize the operations in the face of growing demand. They said: "As we increase our volume, we should not be increasing our frontline anymore and rather to maintain that level of number and to rationalize what request should be processed by our agents."
 - The director of support product and technology at the consumer products company shared how Ada improved their

organization's self-service resolution rates while also improving reporting accuracy and insight into customer preferences. They said: "We now have better visibility into individual member segment events. We figured out that our customers prefer to self-serve rather than talk to a human for help. We have better visibility into individual interactions. It's hard to put a dollar value on that deeper insight."

- Decreased customer effort. Interviewees indicated several ways in which Ada lessened the amount of effort required for customers, getting them to resolution faster.
 - The customer experience manager at the internet service provider shared how their organization's customers had higher success rates with Ada's self-service resources. This had a knock-on effect of reducing the number of post-service calls for self-installed customers and increased satisfaction for customers utilizing its guided resources.

THE ROI OF CX TRANSFORMATION

The business impact of improving CX scores by one point can have significant impacts on the annual incremental revenue per customer.

Loyalty, retention, and customer lifetime value can all increase if customers enjoy positive and appropriate experiences.

Certain sectors like auto manufacturing, banking, and hotels have seen an exponential relationship between better CX and growth.⁵

Customers who have better experiences spend more with a company. On average, when brands deliver a high-quality experience by communicating clearly, their customers are 2.7 times more likely to spend more with them.

		Annual incremental revenue per customer*	x	Average number of customers per company†	=	Total revenue
<u></u>	Auto manufacturers (mass market)	\$48.82	х	18 million	=	\$879 million
▦	Hotels (upscale)	\$7.49	х	44 million	=	\$330 million
	Wireless service providers	\$3.48	х	82 million	=	\$285 million
E	Retailers (big box)	\$2.44	х	100 million	=	\$244 million
$\widehat{\neg}$	Auto/home insurers	\$14.29	х	15 million	=	\$214 million
	Hotels (midscale)	\$5.67	х	30 milliion	=	\$170 million
슈	Airlines	\$3.48	x	48 million	=	\$167 million
٢	Banks (multichannel)	\$8.19	х	15 million	=	\$123 million
ř	TV service providers	\$6.11	х	17 million	=	\$104 million
Ē	Internet service providers	\$5.26	х	16 million	=	\$84 million
÷	Rental cars	\$1.67	х	40 million	=	\$67 million
	OTT providers	\$0.37	х	100 million	=	\$37 million
₽	Auto manufacturers (luxury)	\$104.54	х	350,000	=	\$37 million
ŝ	Banks (direct)	\$9.82	х	3 million	=	\$29 million
	Credit card issues	\$0.08	х	61 million	=	\$5 million

The Revenue Impact Of A 1-Point Improvement in CX Index[™] Score

Results In:

Base: 110,828 US online consumers (18+) who interacted with a specific brand within the past 12 months Source: Forester Analytics Customer Experience Index Online Survey, US Consumers 2018

This analysis shows the effect on revenue potential of increasing CX index scores by 1 point from the average CX index score of the largest brands the industry. Curves for individual brands differ from this industry curve. For brands that don't have a linear relationship between CX and revenue, is evenue effect of improving CX by 1 point will vary greatly depending on the CX index score that serves as the starting point for this analysis. The number of customers represents that of a big player in the industry based on inputs that includeForester Analytics Consumer Technographics®, orsetr's analysis, and bublic variable industry data

- In addition to shortening the amount of time a customer waits before reaching a live agent (see Benefit B), Ada can further decrease the duration of the interaction once initiated. The director of support product and technology at the consumer products company pointed out how the valuable information included in customer-authenticated interactions impacted their organization's agent chat time. They said: "We saw a 30-second reduction in average agent chat time with Ada. We introduced a workflow where our customers are authenticated before being routed to a human, so we don't have to do that during the live contact side."
- The program manager at the technology company pointed to the outsized value of incremental insights on their organization's customer flows in Ada. They said: "We kicked off a series of initiatives focusing on intent-based optimization. We designed a welcome menu for customers including buttons for popular product categories and the option to type in a question. We found out that 60% of users actually rely on those buttons and the menu rather than typing the question."
- Time to value for new products and features. Ada's low-code platform makes it easier for business users to action customer insights harvested from interaction data with Ada (see Benefit C).
 - The director of support technology at the consumer products company shared:
 "Ada unlocks our ability to deploy selfservice functionality in minutes rather than months, all while making things easier for our members."

- The vice president of CX management and the CX strategy and innovations head at the fintech payments company described how Ada reduced complexity and sped up time to value for their organization. They said: "One of the attractive points about Ada is it has almost zero capex. Costs should be very variable, and it should translate to certain value quickly. With Ada, we pay when we get value with immediate ROI."
- The vice president of customer support at the retail and payments company said: "[Ada's value is that it's] an early warning indicator of problems to come. The bot identifies functional issues. Customers are asking questions before our internal teams recognize there is a problem."

"Doing simple things with Ada to improve customer experience really made a difference more than any of the dynamic flows we've designed." *Program manager, technology*

- Ada moderated the inflow of customer inquiries for agents. Ada's intelligent routing and improved self-service resolution (see Benefit A) lowered the number of inquiries reaching a live agent and resulted in a more balanced and manageable mix of inquiries for agents.
 - The customer experience manager at the internet service provider noted that Ada routed their organization's customers to live agents better and typically for more technical inquiries. With fewer simple inquiries reaching them, agents were

permitted more time with them to provide better quality support with less pressure on the agents.

- The vice president of CX management and the CX strategy and innovations head at the fintech payments company shared how Ada helped moderate the flow of sensitive customer inquiries. They shared that their organization built an email handoff for Ada to offload sensitive interactions. They said: "We have integrated Ada to our ticketing system to cater customer requests that would not need a live interaction with our agent."
- Enhanced employee-facing toolset. According to several interviewees, Ada generally provided employees with better insights in an enhanced, easy-to-use interface.
 - The program manager at the technology company explained the process for resources training to use Ada. They said: "It's very intuitive actually. The bot's very user-friendly, so it does a really good job."
 - The vice president of customer support at the retail and payments company said: "My team that uses Ada loves it. They love the simplicity of it [and] they love the fact they don't have to be a coder to use the system. They do like the fact that it is a user-friendly operating environment."

Interviewees valued their organizations' strong partnerships with Ada.

 The vice president of CX management and the CX strategy and innovations head at the fintech payments company shared that their team continues regular sessions with its Ada technical team. They noted:
 "With the support that we get from their technical consultant team, we're able to gain insight on how to better configure the

CUSTOMER VOICES: FIGHTING FRAUD FROM BOTH SIDES

Ada provided interviewees' organizations with a nimble tool for mitigating the impact of fraudulent actors while providing better service to customers who may have been the victim of fraud.

According to Forrester, fraud is among the top payment-related challenges for merchants in the US.⁶ Forty-two percent of retailers said their top priority was improving security by reducing fraud and managing encryption.

Interviewees from fintech and payments reported that Ada assisted their organizations in mitigating the business impacts of fraud.

 The vice president of customer support at the retail and payments company configured Ada's intelligent routing to sequester members known to have committed fraud. This reduced the level of live agent time related to sensitive or fraudulent inquiries.

He explained: "We don't want them talking to an agent. We lock them in the chatbot. In our previous solution on chat, we didn't sequester. It wasted a significant amount of live agent representative resources in the range of multiple FTEs and hundreds of thousands of dollars.

On the other side of fraud, the vice president of CX management and the CX strategy and innovations head at the fintech payments company shared how Ada helps their organization serve customer fraud concerns more effectively. They reported: "We have enabled a seamless transition for fraud concerns raised by customers. In these cases, customers are subjected to a human agent right away. We need to be fast in serving this type of concern so that we would be able to recover what was lost from our customer." platform to make it an ideal customer experience."

 The vice president of customer support at the retail and payments company expressed her team's appreciation for Ada. They said: "I enjoy dealing with Ada because I feel that they are authentic and sincere in what they want to accomplish and how they want to help their customers."

FLEXIBILITY

The value of flexibility is unique to each customer. The nimble framework and broad-reaching capabilities permit multiple scenarios in which a customer might implement Ada and later realize additional uses and business opportunities, including:

- Deploying new use cases for Ada. The vice president of customer support at the retail and payments company said they look forward to deploying Ada into their organization's customerfacing profit centers. They said: "[We want to take it] from a high-velocity FAQ bot to a bot that can be proactive in its engagement, helping customers acquire products and services."
- Improving visibility of customer actions with Ada. To further gain visibility into individual member events, the director of support technology at the consumer products company said they plan to lean into the reporting capabilities in Ada. He said: "The reporting is quite good. So we'll use their reporting tool built into the platform and then we'll also use the reporting API to pull it into other platforms. We can more easily look at a specific flows that we built, how many people went through that flow, and what happened as a result of that conversation."
- Developing new and improved products with bot-derived customer insights. The program manager at the technology company said:

"Everything we've done up until now has made the bot really sustainable. It's a well-oiled machine. We've got proper things in place because it takes a while for something like this to mature. Going forward, it will be cool to meet the customer where they are, maybe even with the bot there within the product. We want to increase the level of effort that we put into ingesting customer data and then use that to create really tight, refined experiences."

The vice president of CX management and the CX strategy and innovations head at the fintech payments company pointed to the flexible approach to scaling Ada. They said: "We will increase the utilization of the platform because this is a much cheaper touch point. As we build more products and services in our platform, the concerns get more complicated, so the technology could help us further protect our customers and allow us to connect with them in a manner that they feel safe and so they continue to trust our brand."

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

"Doing simple things with Ada to improve customer experience really made a difference more than any of the dynamic flows we've designed." *Program manager, technology*

Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs

TOLA	COSIS						
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Dtr	Ada subscription and professional services fees	\$27,500	\$759,000	\$825,000	\$924,000	\$2,535,500	\$2,093,533
Etr	Internal bot deployment and maintenance costs	\$28,265	\$216,196	\$265,208	\$313,673	\$823,341	\$679,654
Ftr	Change-management authentication and integration costs	\$8,665	\$156,781	\$77,581	\$64,381	\$307,408	\$263,680
	Total costs (risk- adjusted)	\$64,430	\$1,131,977	\$1,167,789	\$1,302,054	\$3,666,250	\$3,036,867

ADA SUBSCRIPTION AND PROFESSIONAL SERVICES FEES

Evidence and data. Pricing for interviewees' organizations was largely driven by the volume of Ada bot interactions made annually and paid per interaction rather than in an up-front fee.

The vice president of CX management and the CX strategy and innovations head at the fintech payments company described gaining the ability shift ongoing capital expenditures to paying variable costs when the value of the solution has been delivered at the interaction level.

"As we go up in bot interaction volume and we utilize more of the system, we potentially get more savings out of it."

Vice president of CX management and the CX strategy and innovations head, **Modeling and assumptions.** Forrester assumes the following about the composite organization:

- The composite organization's bot interaction volume is driven by the number of product lines in which Ada is deployed for automated interactions.
- Pricing may vary. Contact Ada for details.

Risks. Forrester recognizes that these results may not be representative of all experiences and the cost will vary depending on the following factors:

- The organization's prior experience with bots.
- The organization's total bot interaction volume.
- The complexity of the bot use case.
- The organization's bot deployment across product lines and business units.
- Additional professional services needed beyond the standard offerings (e.g., advanced integrations, reporting modules, etc.).

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$2 million.

Ada	Subscription And Profession	al Services Fees				
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
D1	Ada subscription fees	Composite	\$0	\$640,000	\$750,000	\$840,000
D2	Ada professional services	Composite	\$25,000	\$50,000	\$0	\$0
Dt	Ada subscription and professional services fees	D1+D2	\$25,000	\$690,000	\$750,000	\$840,000
	Risk adjustment	10%				
Dtr	Ada subscription and professional services fees (risk-adjusted)		\$27,500	\$759,000	\$825,000	\$924,000
	Three-year total: \$2,535,500		Three	e-year present va	alue: \$2,093,533	

INTERNAL BOT DEPLOYMENT AND MAINTENANCE

Evidence and data. Interviewees described various ways in which their organizations brought together business owners and other stakeholders to build a robust, agile interaction automation solution with Ada.

- Building and maintaining bots. Ada allowed interviewees' organizations to shift the general build and day-to-day maintenance of the bot to non developer resources, often to customersupport or digital communications specialists. Interviewees' organizations had various configurations for bot oversight, often with specialists dedicated to day-to-day bot operations, along with product-manager/projectmanager oversight with other product lines and business units.
 - The program manager at the technology company said they managed the chatbot program as her only product with three to four bot-specialist resources under her.
 - The customer experience manager at the internet service provider described their organization's day-to-day efforts to maintain its Ada bot instance. They said: "I have two developers and two more resources from the customer operations team that are in Ada pretty much every day. They are looking at unanswered questions and clarifications and other basic fine-tuning and improvements. Initially, it took us longer. But now that we have a better idea where the information is, it's more like an hour a month worth of reporting, research, and analysis on what we're seeing."
 - The director of support product and technology at the consumer products company said they kept day-to-day bot maintenance responsibilities with a system admin who was "a step above

help-desk function [and] somewhere between Tier 2 and Tier 3."

 The vice president of customer support at the retail and payments organization said their organization dedicated six resources to the bot full-time to deal with a high volume of more than a million engaged chats.

"Deployment was kind of a big bang, and then we were in a steady state."

Director of support product and technology, consumer products

- Spinning up and scaling the bot in new areas
 of the organization. Beyond the bot-dedicated
 resources, the interviewees described an
 evolving set of stakeholders related to each new
 product line to which Ada was to be deployed.
 These resources included business-process
 experts, subject-matter experts, and productspecific customer-experience specialists. These
 resources would be involved in the build of their
 product-specific bot instances in collaboration
 with the bot specialists and product owners.
 - The program manager at the technology company said a team of bot specialists collaborated with a team of partially dedicated content strategists called upon as needed. The program manager elaborated, "They probably seem like 10 to 12 people, but they don't necessarily only work on chatbot; they also work on help-center content and support other parts of the business."

- The vice president of CX management and the CX strategy and innovations head at the fintech payments company explained the continuous deployment and maintenance costs related to building and scaling out Ada instances across their organization. They shared, "It's not really a one-time build for us because as we build more services into our application, we also need to build more information in Ada."
- The director of support product and technology at the consumer products company described how their organization scaled Ada into instances in other countries in the later phases of deployment. They said: "It took us three or four months to roll out to all of the countries and then to maintain the flows, so it just adds onto that ongoing maintenance where you have to make a change."

Further technical implementation efforts regarding API integrations and security considerations are described in Cost F.

Modeling and assumptions. The composite organization deploys Ada as follows.

- To manage the bot, the composite organization dedicates a team including a product manager and up to two fully dedicated bot specialists to maintain the bot across all product lines and business units.
- In addition to the team dedicated to the bot, resources from each product line with Ada scaled dedicate resources to building initial flows and analyzing bot impacts on the respective product. These resources are dedicated to a two-week sprint in collaboration with the bot administration team.

Risks. Forrester recognizes that these results may not be representative of all experiences and the cost will vary depending on the following factors.

- The scope and timeline of the organization's initial implementation project.
- The number of resources the organization dedicates to daily bot maintenance and oversight.
- The number of and role of resources required to build out product-specific use cases for Ada.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of \$680,000.

"Deployment was kind of a big bang, and then we were in a steady state."

Director of support product and technology, consumer products

"Anyone can create a bot in Ada if you're passionate about a product."

Manager of digital communications, fintech

Inter	nal Bot Deployment And Mainte	enance				
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
E1	Bot program manager FTE overseeing bot administration across company	Composite	0.08	1.0	1.0	1.0
E2	Bot program manager fully burdened annual salary	TEI standard	\$102,956	\$102,956	\$102,956	\$102,956
E3	Bot specialist FTEs maintaining bot	Composite	0.08	1.0	1.5	2.0
E4	Bot specialist fully burdened annual salary	TEI standard	\$86,131	\$86,131	\$86,131	\$86,131
E5	Subtotal: Initial and ongoing Ada bot maintenance and administration	Composite	\$15,757	\$189,088	\$232,153	\$275,219
E6	Hours of business-process specialist involvement in BU-specific bot planning and build process	Composite	120	90	72	60
E7	Number of business-process specialist FTEs involved in BU-specific bot planning and build process	Composite	2	2	3	4
E8	Hourly rate per business process specialist	TEI standard	\$41	\$41	\$41	\$41
E9	Subtotal: BU-specific resources needed to scale Ada	E6*E7*E8	\$9,938	\$7,454	\$8,944	\$9,938
Et	Internal bot deployment and maintenance	(E1*E2)+(E3*E4)	\$25,696	\$196,541	\$241,098	\$285,157
	Risk adjustment	10%				
Etr	Internal bot deployment and maintenance (risk-adjusted)		\$28,265	\$216,196	\$265,208	\$313,673
	Three-year total: \$823,341		т	nree-year presen	t value: \$679,654	

CHANGE-MANAGEMENT AUTHENTICATION AND INTEGRATION

Evidence and data. Interviewees said that as their organizations scaled their use of Ada, there were accompanying change-management efforts in which the Ada effort interplayed.

- Change management. Importantly, interviewees described broader change-management efforts to digitally transform their organizations' customer experiences and operational interactions. Ada deployment was often addressed as a vital part of an overlapping strategy with other channels and complementary business units.
 - The vice president of customer support at the retail and payments company shared: "We are improving and investing in all of our digital properties in terms of customer comprehension, etc. And also, we are investing in our other channel technologies as well, such as the IVRs or even our CRM."
 - Similarly, the program manager at the technology company shared: "We are focusing a lot on our digital strategy not just for the bot, but [for] all other channels and how to make it easy and the transition smoother for a customer."
- Training. To effectively scale adoption of Ada's customer- and agent-facing instances, interviewees mentioned the following training efforts:
 - The program manager at the technology company explained the process for training to use Ada. They said: "They have Ada University with courses on how to create an answer, train an answer, how machine learning works within the bot, etc. The courses were very helpful as I brought in new members who were going to be in the bot a lot."

- The director of support product and technology at the consumer products company said their organization trained one main resource to use Ada. They said, "One of the benefits that we like most about Ada is their training knowledge base."
- Integrations. To build out MVPs with Ada, interviewees described the occasional need for DevOps, SecOps, and other resources to properly manage integrations.
 - The director of support product and technology at the consumer products company described the ongoing need for technical efforts. They said: "Since going live, we've made a lot of changes to try to make it more accessible [and] easier to use with deeper integrations."
 - The program manager at the technology company explained their company's approach to data and integrations with Ada. They said: "We have five packaged APIs included in our contract, as well as the data layer. Our company really wants all third-party hosted data to be brought in-house so our data-science team can work on it in our internal dashboards. That way we can paint a full picture of what people are doing and where they go before and after going to the bot. This is an added cost we take on."
- Authentication. Interviewees described the authentication phase as a key moment in integrating important customer data info, offering support for some of the bot's most important functionality related to a more seamless and secure customer experience.
 - The customer experience manager at the internet service provider said authentication allowed their organization

to pull into Ada-account-specific service information for customers reaching out.

- The vice president of customer support at the retail and payments company described the more advanced authentication processes. They stated: "Authentication actually came in our second phase, and that was more complex. It did need engineering resources, connecting to the website, and then from the website, we migrated to our mobile apps. So, we did it in three phases, but that was also based on other prioritization and availability. I'm sure you could develop it a lot faster."
- Data storage. The same interviewee pointed to an additional consideration regarding data storage requirements and costs. They said, "We have to think about storage costs from a datastorage perspective because, right now with Ada, we don't do any consent management."

Modeling and assumptions. To support broad adoption of Ada within the composite organization's broader CX change management efforts, the composite organization invests in:

- **CX training and change-management costs.** To oversee the organizationwide customerexperience change-management process:
 - The composite dedicates an executive to oversee Ada deployment at a high level. This resource is 25% dedicated with a fully burdened annual salary of \$162,000.
 - All CX agents are trained on Ada by the end of Year 1. In addition to their Adarelated training, all agents dedicate 4

hours to change management in each of the three years.

- Authentication and integration costs. To deploy technical aspects of the Ada instances as it scales across organizational product lines, the composite organization dedicates:
- Two DevOps resources working 6 hours a month at a fully burdened hourly rate of \$64.
- One SecOps resource working 2 hours a month at a fully burdened hourly rate of \$58.

Risks. Forrester recognizes that these results may not be representative of all experiences and the cost will vary depending on the following factors:

- The number and complexity of the organization's development projects completed on an annual basis will impact both the technology resources and agents dedicated to chatbot and platform development.
- The scale of implementation and interaction volumes will impact the required dedicated technology resources for platform administration.
- Agent training will vary depending on the total number of agents using the Ada platform as well as the annual churn rates in messaging and chat operations.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of \$264,000.

Chan	ge-Management Authenticatio	on And Integrat	ion			
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	CX change management: internal executive oversight	\$162,000*25% dedicated	\$3,375	\$40,500	\$40,500	\$40,500
F2	Number of CX agents trained on Ada	Composite	10	95	9	15
F3	Hours of training per CX agent	Composite	16	16	4	2
F4	Hours of change-management effort per CX agent	TEI standard	4	4	2	1
F5	CX agent hourly rate	TEI standard	\$20	\$20	\$20	\$20
F6	CX training and change-management	F1+(F3+F4) *F2*F5	\$7,375	\$78,300	\$41,580	\$41,400
F7	DevOps hours for authentication, integration	Composite	6	72	72	72
F8	DevOps fully burdened hourly rate	TEI standard	\$64	\$64	\$64	\$64
F9	SecOps hours authentication, integration	Composite	2	24	24	24
F10	SecOps fully burdened hourly rate	TEI standard	\$58	\$58	\$58	\$58
F11	Subtotal: Authentication and integration	(F7*F8)+ (F9*F10)	\$502	\$6,028	\$6,028	\$6,028
Ft	Change-management authentication and integration	F6+F11	\$7,877	\$142,528	\$70,528	\$58,528
	Risk adjustment	10%				
Ftr	Change-management authentication and integration (risk-adjusted)		\$8,665	\$156,781	\$77,581	\$64,381
	Three-year total: \$307,408		Tł	nree-year presen	t value: \$263,680	

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS



Cash Flow Chart (Risk-Adjusted)

Cash Flow Analy	ysis (Risk-Ad	justed Estimates)
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	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$64,430)	(\$1,131,977)	(\$1,167,789)	(\$1,302,054)	(\$3,666,250)	(\$3,036,867)
Total benefits	\$0	\$2,637,891	\$5,916,583	\$10,826,971	\$19,381,446	\$15,422,285
Net benefits	(\$64,430)	\$1,505,915	\$4,748,794	\$9,524,917	\$15,715,196	\$12,385,418
ROI						408%
Payback						<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: CX Essentials: The Basics Of Customer Experience In Plain Language CX Pros Can Use To Explain It To Colleagues". Forrester. August 2, 2021

³ Source: Matthew Dixon, Lara Ponomareff, Scott Turner, and Rick DeLisi, "Kick-Ass Customer Service," Harvard Business Review, January-Febrary 2017.

⁴ Ibid.

⁵ Source: "The ROI Of CX Transformation," The Business Case Report In The CX Transformation Playbook," Forrester Research, Inc., January 22, 2021.

⁶ Source: The State Of Retail Payments In 2022: Findings From Forrester's Biennial Study With The National Retail Federation." Forrester. September 23rd, 2022

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