A Forrester Total Economic Impact™
Study Commissioned By Zendesk
May 2017

The Total Economic Impact™ Of Zendesk

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Benefits And Costs

Increased efficiency of agents:
$1,254,567

Deflected customer interactions:
$686,490

Total costs:
$770,763

Executive Summary

Zendesk commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) that organizations may realize by utilizing Zendesk's customer support products to improve handling customer interactions.

The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Zendesk on their organizations. To better understand the benefits, costs, and risks associated with a Zendesk implementation, Forrester interviewed seven organizations with experience using Zendesk's customer support products.

Prior to Zendesk, the organizations used a variety of cloud-based software tools. The director of customer care at one company told Forrester: "Our previous tool lacked the ability to make changes and adapt on the fly. That particular tool was very cumbersome to make fields and system changes. Something as simple as that oftentimes required developer knowledge to get that accomplished." Another director said: "What we didn't have with our previous tool was a way to streamline telephony delivery. We had three different call centers, and each had their own phone numbers and phone setups."

After implementing Zendesk, another executive said: "Using Zendesk made it a lot easier for us to grow and add on locations, diversify for a little disaster recovery, and to make it seamless to the customer. We very carefully track customer satisfaction from customer calls, and within the first nine months of implementing Zendesk, we realized an 8-point increase on a 100-point scale."

Key Findings

Quantified benefits. The following risk-adjusted present value (PV) benefits are representative of those experienced by the companies interviewed:

- **Increased efficiency of agents.** Using Zendesk, the organization streamlined interactions with customers through automated responses to 20% of emails and a reduced length for the average customer phone call. These improvements affected tens of thousands of interactions and avoided the need to hire headcount, resulting in a cumulative savings of more than $1.2 million.
- **Deflected customer interactions.** The organization used Zendesk to deflect interactions to self-service and to lower-cost channels such as chat. By the end of three years, the organization deflected 15% of interactions to chat and 20% to self-service, for a total savings of $686,490.
- **Improved agent experience and retention.** Zendesk was a more user-friendly tool that allowed agents to focus on solving customer problems rather than managing multiple, nonintuitive screens and older call tracking systems. The organizations experienced an improvement in both retention and recruiting of agents, avoiding costs of $287,304.
- **Avoided cost of maintaining previous platform.** The previous platforms used by the organizations required more system administration and ongoing maintenance than Zendesk. By moving to Zendesk, the organization avoided these costs and saved $708,753.

ROI
390%

Benefits PV
$3.8 million

NPV
$3 million

Payback
2.9 months

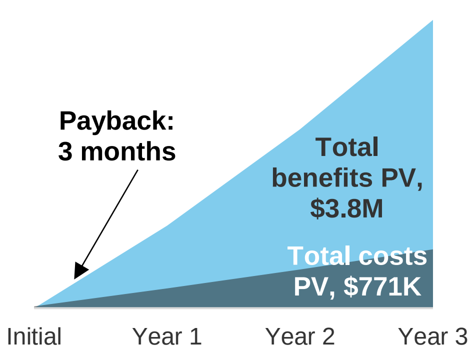
- **Avoided license cost of previous software.** By not renewing the license for the previous software platform, the organization no longer incurred this cost. The savings totaled more than $250,000 each year and $837,548 over three years.
- **Increased conversion rates engaging over chat.** Organizations that used chat during the sales process found that customers were more willing to engage and that conversion rates increased. Although quantified, this benefit is excluded from the ROI calculation (see Appendix A).

Costs. The interviewed organizations experienced the following risk-adjusted PV costs:

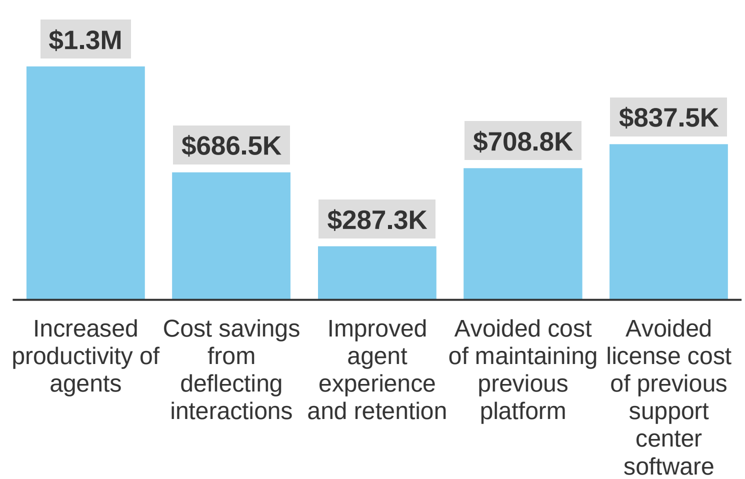
- **Cost of Zendesk license.** The fees paid to Zendesk assumed 100 agents that grew by 20% annually. The license fees include a weighted average that combines Zendesk Support (Enterprise edition), plus phone and chat capabilities for different types of customer interactions. The license fees paid to Zendesk totaled $615,633.
- **Cost of implementation.** Implementing Zendesk required an internal team of four employees, applying half of their effort to the project, for a total of six weeks. The cost of this setup was $24,570.
- **Cost of incremental (optional) projects.** Some of the organizations also funded special projects to enhance the functionality and improve the agent usability and experience. On average, the cost for these improvements was $50,000 per year, or a risk-adjusted $130,560 over three years.

Forrester's interviews with seven existing customers and subsequent financial analysis found that an organization based on these interviewed organizations experienced benefits of $3.8 million over three years versus costs of $770,763, adding up to a net present value (NPV) of $3 million and an ROI of 390%.

Financial Summary



Benefits (Three-Year)



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TEI Framework And Methodology

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing Zendesk.

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 Zendesk can have on an organization:

The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

DUE DILIGENCE
Interviewed Zendesk stakeholders and Forrester analysts to gather data relative to Zendesk.

CUSTOMER INTERVIEWS
Interviewed seven organizations using Zendesk to obtain data with respect to costs, benefits, and risks.

COMPOSITE ORGANIZATION
Designed a composite organization based on characteristics of the interviewed organizations.

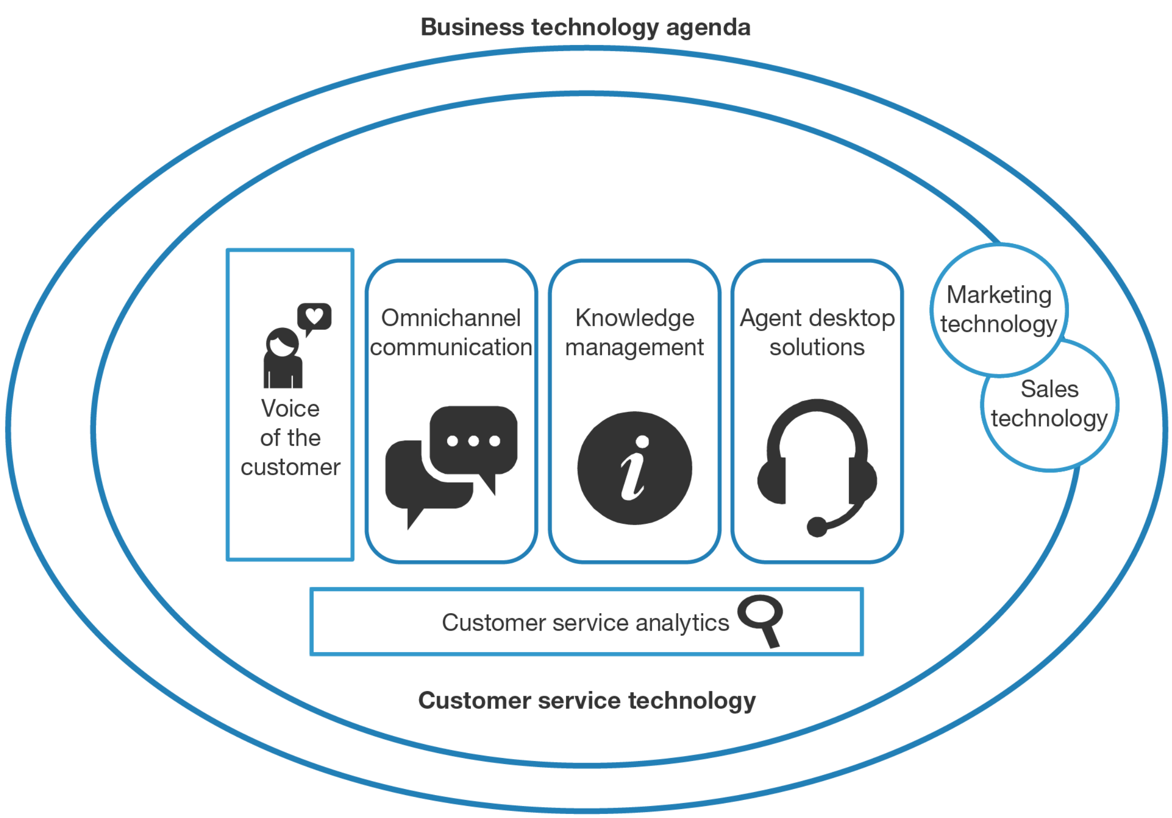
FINANCIAL MODEL FRAMEWORK
Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organizations.

CASE STUDY
Employed four fundamental elements of TEI in modeling Zendesk's impact: benefits, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix B for additional information on the TEI methodology.

The Customer Experience

The experiences of the seven companies interviewed parallel findings in Forrester's published research: "To provide friction-free customer service experiences, [companies] must tap into technologies that enable communications with customers over voice, digital, and social channels. Ideally, those technologies also deliver contextual content to employees so they can answer customer questions, deliver proactive and personalized service using analytics-derived insights, and listen and react to the voice of the customer. [Companies] increasingly must look at these technologies as part of a business technology (BT) agenda that focuses on technologies that organizations design to win, serve, and retain customers. These technologies fall into five functional areas:

- "Omnichannel communication. These applications support the business processes for interacting with customers over voice, electronic, and social communication channels.
- "Knowledge management. These applications help you identify, create, review, publish, and maintain multimedia content, including video, which allows customer service agents to answer customers' questions and enables customers to find answers to their questions via web self-service portals.
- "Agent desktop solutions. This category comprises applications that agents use to create and manage incidents (cases) in response to customer inquiries.
- "Customer service analytics. This category comprises analytics that organizations use to deliver an optimal service interaction that targets the persona of the customer and the issue at hand. Technologies include next-best-action and interaction analytics.
- "Voice of the customer. This category comprises applications that organizations use to gather structured and unstructured feedback from social media sites."



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The Zendesk Customer Journey

BEFORE AND AFTER THE ZENDESK INVESTMENT

Interviewed Organizations

For this study, Forrester conducted seven interviews with Zendesk customers. Interviewed customers include the following:

INDUSTRY	INTERACTION TYPES	CHANNELS	NUMBER OF AGENTS
Footwear and apparel manufacturer	Incoming product orders, customer support, support for in-store purchases	Telephone, email, chat	70
Transportation specialty firm	Incoming product orders, customer support for existing orders	Telephone	250
Financial services provider	Outbound customer solicitation, facilitate customer through extended purchase process, collections, customer support	Telephone, email, chat	240
Internet publishing platform	Incoming customer support	Telephone, email	350
Relocation services provider	Outbound customer solicitation, inbound customer scheduling	Email	15 to 20 (changes due to extreme seasonality)
Email marketing provider	Incoming customer support	Telephone, email, chat	260
Apparel eCommerce provider	Incoming product order, eCommerce customer support, talent/artist relations	Email, chat, phones in Europe, social media	25 internal agents; additional 75 outsourcing vendors

Composite Organization

Based on the interviews, Forrester constructed a composite organization to serve as the basis for building a financial model. The assumptions on which the financial model is based and that drive the remaining analysis are an organization with the following characteristics:

- Manages a support center for both purchases and customer questions.
- Employs 100 support agents.
- Historically, focuses on phone and email interactions.
- Is rapidly expanding chat as a significant channel.
- Provides support in four languages.
- Seeks to deflect the maximum number of customer inquiries to self-service.
- In the first year of Forrester's financial model, the customer engagements are spread across the following channels:
  - 50% phone; declining by 10% per year.
  - 35% email; remaining constant.
  - 5% chat; increasing 5% per year.
  - 10% self-service; growing 5% per year.

> "Using Zendesk made it a lot easier for us to grow and add on locations, diversify for a little disaster recovery, and to make it seamless to the customer."
>
> *Customer engagement director, financial services provider*

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Financial Analysis

QUANTIFIED BENEFIT AND COST DATA AS APPLIED TO THE COMPOSITE

Total Benefits

REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Increased efficiency of agents	$411,825	$523,260	$595,935	$1,531,020	$1,254,567
Btr	Deflected customer interactions	$116,280	$268,898	$477,233	$862,410	$686,490
Ctr	Improved agent experience and retention	$95,760	$111,720	$143,640	$351,120	$287,304
Dtr	Avoided cost of maintaining previous platform	$285,000	$285,000	$285,000	$855,000	$708,753
Etr	Avoided license cost of previous software	$280,800	$336,960	$404,352	$1,022,112	$837,548
	Total benefits (risk-adjusted)	$1,189,665	$1,525,838	$1,906,160	$4,621,662	$3,774,662

Increased Efficiency Of Agents

Each of the organizations reported improvements in agent productivity when migrating from another tool to Zendesk (except for the startup, which had no previous tool). Specifically, the organization reported:

- A 15-second improvement in the average call duration during the first year and a 25-second improvement in the second and third years (based on an average call length of 500 seconds prior to using Zendesk).
- The ability to use autoresponders to handle 20% of the incoming email.
- A reduced need for dozens of agents.

The increase in productivity realized will vary based on the current productivity of agents. To account for this risk, Forrester adjusted this benefit downward by 15%, yielding a three-year risk-adjusted total PV of more than $1.2 million.

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to be a PV of more than $3.5 million.

Increased Efficiency Of Agents: Calculation Table					
REF.	**METRIC**	**CALC.**	**YEAR 1**	**YEAR 2**	**YEAR 3**
A1	Number of agents	20% growth	100	120	144
A2	Percent of interactions via phone		50%	40%	30%
A3	Average call duration (seconds)	Initially 500 seconds	485	460	435
A4	Performance improvement of phone interactions	$A1_{PY}-A1_{CY}/A1_{PY}$	-3%	-5%	-5%
A5	Impact on agent productivity (avoided FTEs)	A1*A2*A4	1.5	2.4	2.2
A6	Percent of interactions via email		35%	35%	35%
A7	Performance improvement on email interactions using autoresponders		20%	20%	20%
A8	Impact on agent productivity (avoided FTEs)	A1*A6*A7	7.0	8.4	10.1
A9	Total FTEs saved	A5+A8	8.5	10.8	12.3
A10	Average burdened salary		$57,000	$57,000	$57,000
At	Increased efficiency of agents	A9*A10	$484,500	$615,600	$701,100
	Risk adjustment	↓15%			
Atr	Increased efficiency of agents (risk-adjusted)		$411,825	$523,260	$595,935

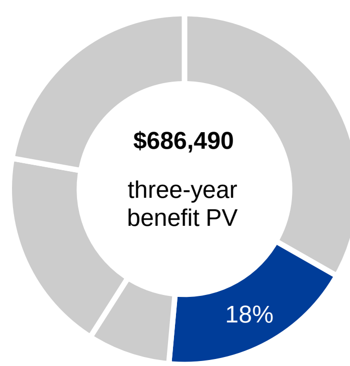
Deflected Customer Interactions

The interviewed organizations were able to increase deflection of interactions to self-service and also shift interactions to lower-cost channels, especially chat. For the financial model, Forrester assumed that over three years:

- Self-service interactions reached 20% of the total.
- An increased number of interactions shifted to chat. Agents can typically handle several customers at the same time, which dramatically increased efficiency. Forrester used a conservative efficiency improvement of 25% for the model.
- More customers became willing to engage over chat, which also increased the number of interactions.
- Because all organizations are shifting toward chat and self-service, Forrester attributed 50% of the benefit to the unique capabilities of Zendesk that make this transition more effective.

The savings in the first year carried over into future years and resulted in a PV savings $807,636 over three years.

The degree of deflection and the savings for each deflection will vary widely, and we encourage readers to adapt this section using their own data. To compensate, Forrester risk-adjusted the benefit downward by 15%, resulting in a total three-year PV benefit of $686,490.



Interactions deflected to lower cost channels: **18%** of total benefits

Deflected Customer Interactions: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	Number of agents		100	120	144
B2	Percent of interactions as chat	Initially 0%	5%	10%	15%
B3	Performance improvement on interactions over chat		25%	25%	25%
B4	Increase in customer interactions due to having the chat channel available		+20%	+30%	+35%
B5	Impact on agent productivity using chat (avoided FTEs)	$B1*(B2_{CY}-B2_{CALC})*B3*(1-B4)$	1.0	2.1	3.5
B6	Percent of interactions deflected to self-service	Initially 5%	10%	15%	20%
B7	Performance improvement on interactions via self-service		75%	75%	75%
B8	Impact on agent productivity from self-service (avoided FTEs)	$B1*(B6_{CY}-B6_{CALC})*B7$	3.8	9.0	16.2
B9	Total FTEs saved	B5+B8	4.8	11.1	19.7
B10	Average burdened salary		$57,000	$57,000	$57,000
B11	Percent attributed to Zendesk		50%	50%	50%
Bt	Deflected customer interactions	B9*B10*B11	$136,800	$316,350	$561,450
	Risk adjustment	↓15%			
Btr	Deflected customer interactions (risk-adjusted)		$116,280	$268,898	$477,233

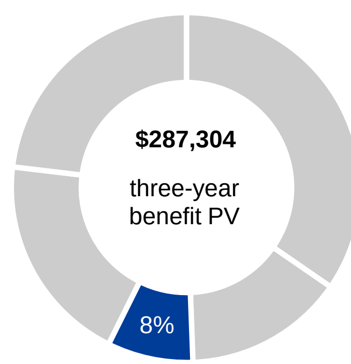
Improved Agent Experience And Retention

Some of the companies experienced a reduction in turnover of agents by using Zendesk as a consolidated tool set for managing interactions with customers. Forrester's interviews showed:

- One customer reported a decrease in agent turnover of more than 20%, but Forrester uses a more conservative value of 15% in the financial model.
- The reduction in agent turnover was part of a broader program to improve the retention of agents, so Forrester attributes 40% of the improvement to Zendesk.
- As a result, the organization avoided the need to hire a total of 55 agents over three years.
- The cost to hire and train an agent averages 35% of an agent's annual salary of $57,000.

The resulting savings over three years of reducing the need to hire and train agents was $359,130.

Because not all the companies that Forrester interviewed reported an improvement in the agent experience, Forrester reduced the value of this benefit by 20%. The risk-adjusted PV savings over three years totaled $287,304.



Improved agent experience and retention: 8% of total benefits

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Improved Agent Experience And Retention: Calculation Table					
REF.	**METRIC**	**CALC.**	**YEAR 1**	**YEAR 2**	**YEAR 3**
C1	Total number of agents		100	120	144
C2	Reduced turnover number of agents leaving	15%	15	18	22
C3	Reduced number of agents leaving that is attributed to using Zendesk	40%	6	7	9
C4	Averaged burdened salary		$57,000	$57,000	$57,000
C5	Average cost to recruit and train a new agent	C4*35%	$19,950	$19,950	$19,950
Ct	Improved agent experience and retention	C3*C5	$119,700	$139,650	$179,550
	Risk adjustment	↓20%			
Ctr	Improved agent experience and retention (risk-adjusted)		$95,760	$111,720	$143,640

Avoided Cost Of Maintaining Previous Platform

To support the previous agent platform, each organization employed staff or maintained a retinue of consultants. In addition, the organizations paid an average of $150,000 per year for additional requests, features, upgrades, and related charges paid to the vendor. By moving to Zendesk, the burden typically required less than one person, and in several of the interviews, the directors told us that they themselves performed the work. The organizations paid additional fees for consultants to design, implement, or manage specific features or capabilities for the previous tools.

The cost for two system administrators at $110,000 each per year and the additional fees totaled $900,000 over three years. Forrester risk-adjusted and reduced the benefit by 5%, resulting in a PV benefit of $708,753.

Impact risk is the risk that the business or technology needs of the organization may not be met by the investment, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for benefit estimates.

Avoided Cost Of Maintaining Previous Platform: Calculation Table					
REF.	**METRIC**	**CALC.**	**YEAR 1**	**YEAR 2**	**YEAR 3**
D1	Two system administrators	$110,000/year/ person	$220,000	$220,000	$220,000
D2	Additional fees and services		$80,000	$80,000	$80,000
Dt	Avoided cost of maintaining previous platform	D1+D2	$300,000	$300,000	$300,000
	Risk adjustment	↓5%			
Dtr	Avoided cost of maintaining previous platform (risk-adjusted)		$285,000	$285,000	$285,000

Avoided License Cost Of Previous Software

By avoiding a renewal of the previous software platform, which averages two to three times the cost of Zendesk, the organization saved more than $1.1 million. Forrester risk-adjusted and reduced the benefit by 10%. The risk-adjusted PV benefit was $837,548 over three years.

Avoided License Cost Of Previous Software: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
E1	Number of agents		100	120	144
E2	License cost of previous solutions	$260/agent/month	$312,000	$374,400	$449,280
Et	Avoided cost of maintaining previous platform	= E2	$312,000	$374,400	$449,280
	Risk adjustment	↓10%			
Etr	Avoided cost of maintaining previous platform (risk-adjusted)		$280,800	$336,960	$404,352

Unquantified Benefit

The composite organization realized additional benefits that Forrester did not include in the financial analysis. In many cases, the organizations lack accurate ways to measure these benefits, but the impact is still recognized.

- **Flexibility with the APIs.** One executive told Forrester: "We definitely needed the ability to leverage the APIs. With our previous tool, we were paying for a lot of excess API use, and some of the early questions for Zendesk were, 'What are our limits?' and 'How can we configure our tools to communicate?'"

  The same executive continued: "We have a lot of sensitive documents and other things that were being stored in our previous tool that we wanted to move out into our own document service platform and then fall into Zendesk at will, more or less."

Total Costs

REF.	COST	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Gtr	Cost of Zendesk license	$0	$206,400	$247,680	$297,216	$751,296	$615,633
Htr	Cost of implementation	$24,570	$0	$0	$0	$24,570	$24,570
Itr	Cost of incremental (optional) projects	$0	$52,500	$52,500	$52,500	$157,500	$130,560
	Total costs (risk-adjusted)	**$24,570**	**$258,900**	**$300,180**	**$349,716**	**$933,366**	**$770,763**

Cost Of Zendesk License

Zendesk offers a number of pricing tiers for its support product, including the Enterprise license evaluated in this study. Additional fees provide access to functionality such as chat and phone capabilities. Among the companies that Forrester interviewed, the firms adopted different pricing for different teams of support agents. For example, a collections group did not need chat capabilities. The pricing information in the study uses the Zendesk list price for its Support, Chat, and Talk was a PV of $615,633 over three years.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total costs to be a PV of $770,763.

Cost Of Zendesk License: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
G1	Number of support agents	20% growth		100	120	144
G2	Average cost per agent per year	$172/month		$2,064	$2,064	$2,064
Gt	Cost of Zendesk license			$206,400	$247,680	$297,216
	Risk adjustment	↑0%				
Gtr	Cost of Zendesk license (risk-adjusted)			$206,400	$247,680	$297,216

Cost Of Implementation

The organizations spent six weeks implementing Zendesk. The composite organization converted its history of support tickets into the Zendesk environment. One organization avoided converting old tickets and was able to go live with Zendesk in just three days, but this did not seem typical. On average, companies assigned four employees to the project for six weeks for about 50% of their time. The resulting cost was $23,400. Forrester risk-adjusted the cost upward by 10%, resulting in a total PV cost of $24,570.

Implementation risk is the risk that a proposed investment may deviate from the original or expected requirements, resulting in higher costs than anticipated. The greater the uncertainty, the wider the potential range of outcomes for cost estimates.

Cost Of Implementation: Calculation Table						
REF.	**METRIC**	**CALC.**	**INITIAL**	**YEAR 1**	**YEAR 2**	**YEAR 3**
H1	Four employees for 50% of time		2			
H2	Six weeks (in years)		0.13			
H3	Average burdened salary		$90,000			
Ht	Cost to implement Zendesk	H1*H2*H3	$23,400			
	Risk adjustment	↑10%				
Htr	Cost of implementation (risk-adjusted)		$24,750			

Cost Of Incremental (Optional) Projects

The organizations told Forrester that they funded additional capabilities, some of which improved the agent experience, provided additional functionality, or even expanded the core language modules. Executives considered most of these projects as optional, but each improved the results realized from using Zendesk. The cost was $50,000, and Forrester risk-adjusted the cost upward by 5%, resulting in a total PV cost of $130,560 over three years.

Cost Of Incremental (Optional) Projects: Calculation Table						
REF.	**METRIC**	**CALC.**	**INITIAL**	**YEAR 1**	**YEAR 2**	**YEAR 3**
I1	Consulting for special functionality			$50,000	$50,000	$50,000
It	Incremental projects to improve agent experience	=I1		$50,000	$50,000	$50,000
	Risk adjustment	↑5%				
Itr	Cost of incremental projects (risk-adjusted)			$52,500	$52,500	$52,500

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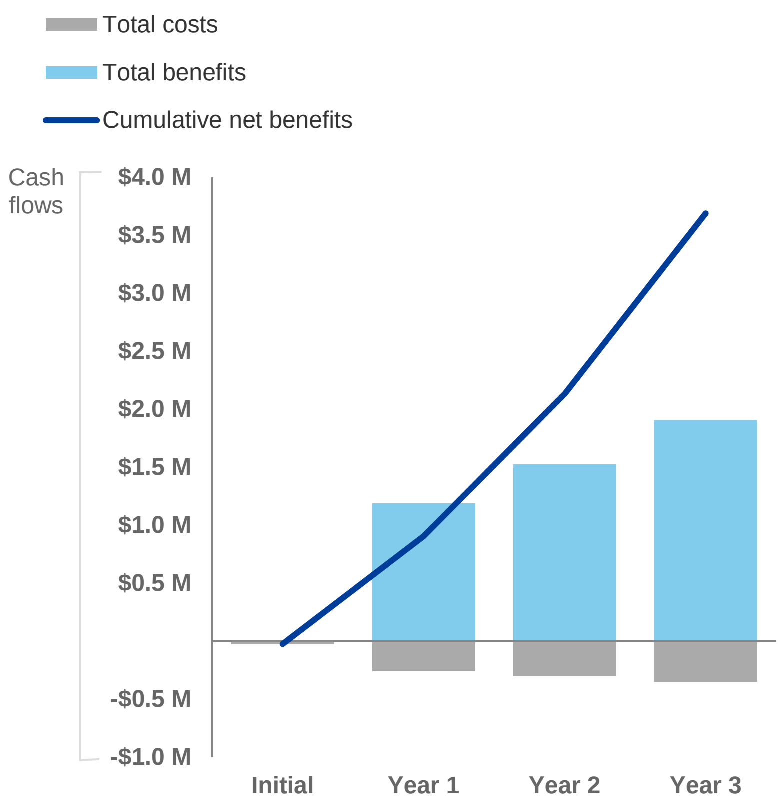
Financial Summary

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 Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	($24,570)	($258,900)	($300,180)	($349,716)	($933,366)	($770,763)
Total benefits	$0	$1,189,665	$1,525,838	$1,906,160	$4,621,662	$3,774,662
Net benefits	($24,570)	$930,765	$1,225,658	$1,556,444	$3,688,296	$3,003,899
ROI						390%
Payback period						2.9 months

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Zendesk: Overview

The following information is provided by Zendesk. Forrester has not validated any claims and does not endorse Zendesk or its offerings.

Zendesk builds software for better customer relationships. It empowers organizations to improve customer engagement and better understand their customers. Zendesk products are easy to use and implement. They give organizations the flexibility to move quickly, focus on innovation, and scale with their growth.

Zendesk was built upon a simple idea: Make customer service software that's easy to use and accessible to everyone. The company has expanded on that idea and now offers a growing family of products that work together to improve customer relationships. These products can be embedded and extended through an open development platform.

The Zendesk Family

Zendesk provides a family of products that helps organizations understand their customers, improve communication, and offer support where and when it's needed most.

Zendesk Support

A beautifully simple system for tracking, prioritizing, and solving customer support tickets

Zendesk Guide

A self-service destination featuring knowledge base articles, community forums, and a customer portal

Zendesk Talk

Call center software that allows for more personal and productive phone support conversations

Zendesk Chat

Live chat software that provides a fast and responsive way to connect with customers in the moment

Zendesk Message

Message software that helps companies engage customers on their favorite messaging apps

Zendesk Connect

Customer intelligence software built for targeted campaigns and proactive engagement

Zendesk Explore

Analytics to help measure and understand the entire customer experience

More than 100,000 paid customer accounts in over 150 countries and territories use Zendesk products. Based in San Francisco, Zendesk has operations in the United States, Europe, Asia, Australia, and South America.

Learn more at http://www.zendesk.com.

Appendix A: Chat Boosts Customer Conversions

Organizations that used Zendesk Chat as a channel for engaging with customers found that an increased number of customers spoke to agents and that the sales process required less time. One organization shared that its typical customer conversation rate was 12%. The conversation rate for customers that engaged over chat was 15.5%. Because executives were skeptical that merely using chat could impact conversions so significantly, the management team ran repeated A/B tests to validate and confirm the experience.

The customer service director told Forrester: "We did A/B testing, so we basically randomly exposed chat 50% of the time in the sales funnel. Based on staffing and volume, the chat option popped up when we had available staff. That's one of the great things about Chat — you can hide or expose it based on staffing availability, so people aren't clicking to chat with you and then waiting because agents are already tied up. But out of that 50/50 test that we did, we had 3.5% lift in conversions. Customers realized that we were there to help and they interacted with us, which allowed us to help and guide them through the purchase process."

Chat increased conversions by 29%

Forrester excluded these results from the financial model because data is unique only to organizations using chat during the sales process. Although excluded, the financial results of Forrester's interviews are shown in the table below. The model assumes:

- The organization began with a revenue stream of $15 million per year.
- Customer conversions before chat averaged 12%.
- Conversion rates lifted to 15.5% using chat.
- An average profit margin of 7%.

Three years of increased conversion rates resulted in an increased revenue of more than $14 million and a total, present-value net profit of $830,455.

Because not all the companies that Forrester interviewed used chat as a channel for generating revenue, Forrester reduced the value of this benefit by 15%. The risk-adjusted savings over three years totaled $705,886.

Incremental Profit Due To Increased Conversions By Interacting Over Chat

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
F1	Revenue from outbound customer interactions using traditional channels	10% per year	$15,000,000	$16,500,000	$18,150,000
F2	Increased conversion rate using chat	3.5%/12%	29%	29%	29%
F3	Revenue from incremental conversions	F1*F2	$4,350,000	$4,785,000	$5,263,500
F4	Average profit margin		7%	7%	7%
Ft	Incremental Profit Due To increased conversions by interacting over chat	F3*F4	$304,500	$334,950	$368,445
	Risk adjustment	↓15%			
Ftr	Incremental Profit Due To increased conversions by interacting over chat (risk-adjusted)		$258,825	$284,708	$313,178

Appendix B: 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.