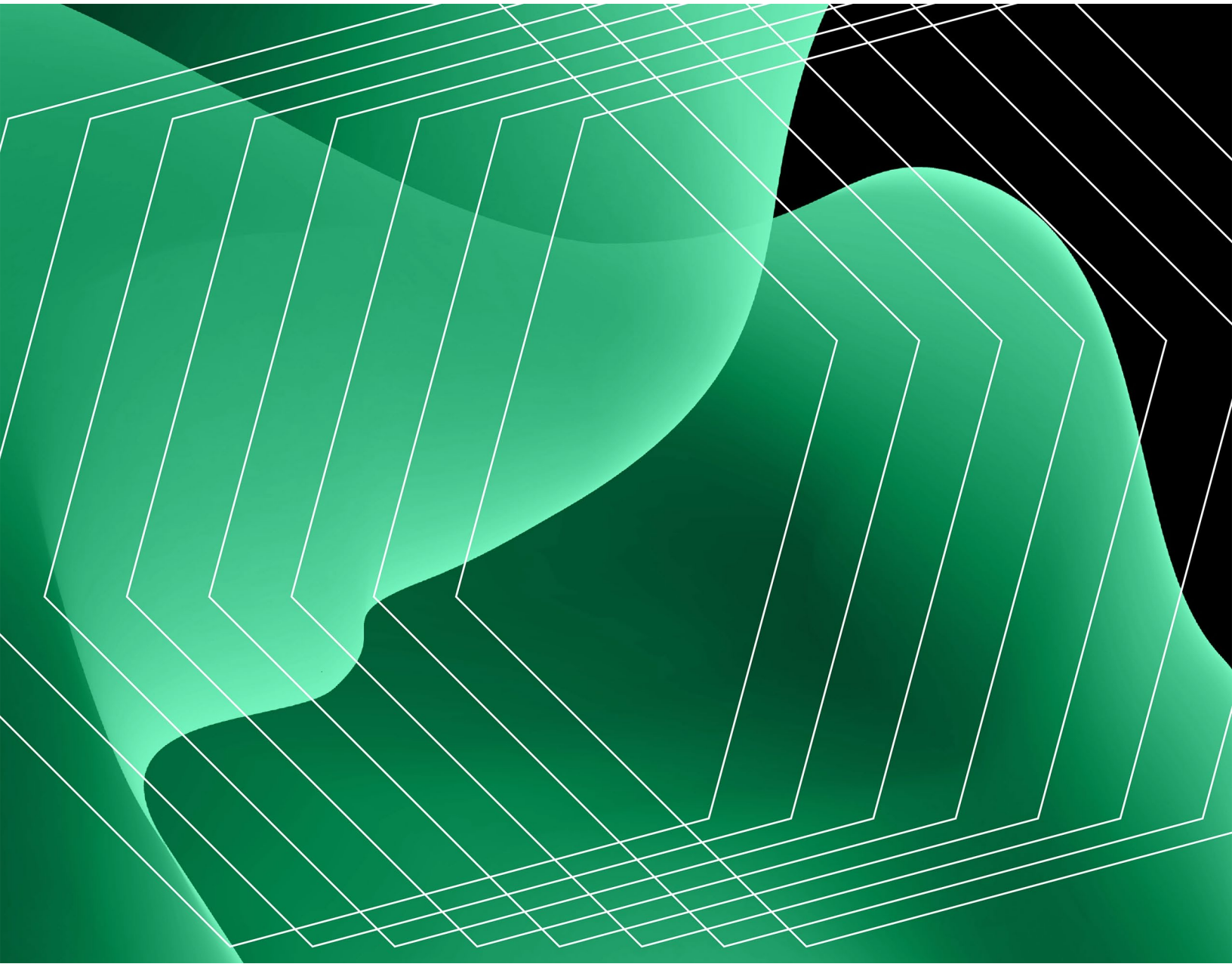


# The Total Economic Impact™ Of Pega Customer Decision Hub

Cost Savings And Business Benefits Enabled By Pega Customer Decision Hub

A Forrester Total Economic Impact™ Study  
Commissioned By Pega, January 2025



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### ABOUT FORRESTER CONSULTING

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## Executive Summary

Marketing and personalization solutions often fall short of “next best experience” (NBX) because they focus on the next best product, offer, or action. Such an inside-out view prioritizes what the brand is trying to sell, rather than successful customer outcomes.<sup>1</sup> Pega Customer Decision Hub provides organizations with the real-time data and analytics needed to unlock personalized opportunities that ensure their customers realize value while maximizing profitability for the brand.

[Pega Customer Decision Hub](#) is a comprehensive platform designed to help organizations make insight-driven decisions in real time. It leverages AI and predictive analytics to unify an organization’s data, analytics, and business logic into a single connected experience across engagement channels. Cross-functional teams are better equipped in the moments that matter, as Pega Customer Decision Hub monitors each customer’s context in real time and uses AI to determine how to meet their needs. The platform can integrate with existing enterprise data and technology ecosystems to deepen customer relationships and maximize customer lifetime value.

Pega commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Pega Customer Decision Hub.<sup>2</sup> The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Pega Customer Decision Hub for their organizations.

# \$652.1M\*

Three-year incremental revenue from next best experience

*\*This is not a risk-adjusted, present value metric. Please reference Benefit A to see how this calculates into the overall ROI*

# \$1.2B\*

Three-year avoided revenue loss

*\*This is not a risk-adjusted, present value metric. Please reference Benefit A to see how this calculates into the overall ROI*

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four representatives at organizations with experience using Pega Customer Decision Hub; we also sent out a questionnaire to nine customers with experience using Pega Customer Decision Hub. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single [composite organization](#) that is a business-to-consumer (B2C) organization with 10 million customers.

Interviewees said that prior to using Pega Customer Decision Hub, their organizations used multiple decisioning tools across different channels and had inefficient manual processes. These prior NBX attempts yielded limited success in maximizing customer lifetime value, leaving organizations with fragmented systems, siloed data across channels, and missed cross-sell opportunities from disjointed customer interactions.

After the investment in Pega Customer Decision Hub, the interviewees unified their marketing, sales, and services messaging across channels and interactions with customers. Key results from their investments included an increase in incremental profits from next best experience, reduced customer churn, contact center and business user efficiencies, and cost savings from retiring personalization engine tools.

## KEY FINDINGS

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

- **\$58.9 million in incremental profit attributable to Pega Customer Decision Hub.** Pega drives incremental profit growth by identifying better cross-sell, upsell,

and retention opportunities with real-time decisioning. The composite organization uses customer data to instantly determine the most suitable action or offer, resulting in a revenue increase of 0.65% in Year 1, 0.9% in Year 2, and 1.00% in Year 3. Over three years, the incremental profit from next best experience is worth more than \$58.9 million to the composite organization.

- **A 15% reduction in the customer churn rate with Pega Customer Decision Hub by Year 3.** Pega Customer Decision Hub equips the composite organization with customer data to better understand customer preferences, behaviors, and needs. By tailoring offers and experiences to individual customers, Pega Customer Decision Hub helps the composite organization reduce churn by 5% in Year 1, 10% in Year 2, and 15% in Year 3. Over three years, this customer retention is worth \$108.4 million to the composite organization.
- **A 20% reduction in the average handle time by Year 3.** Customer service representatives are equipped with relevant customer data and next-best-action recommendations to provide personalized service experiences. This allows them to better serve customer needs and improve the customer experience while reducing customer interaction times. Over three years, contact center efficiencies are worth \$22.0 million to the composite organization.
- **A 25% increase in business user efficiencies by Year 3.** Marketing operations, business analysts, and a variety of other roles benefit from Pega Customer Decision Hub tools, including Pega Ops Manager and the Next Best Action designer. With the assistance of real-time data and advanced analytics from the platform, business users at the composite organization increase efficiencies by 15% in Year 1, 20% in Year 2, and 25% in Year 3. Over three years, business user efficiencies are worth \$574,000 to the composite organization.
- **More than \$1.3 million in cost savings from retiring personalization engine tools.** By consolidating processes within Pega Customer Decision Hub's unified platform, the composite organization is able to retire personalization engine tools as well as avoid maintenance costs for these tools. Over three years, retiring personalization engine tools is worth more than \$1.3 million to the composite organization.

**Return on investment (ROI)****442%****Net present value (NPV)****\$155.9 million**

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

- **A unified marketing strategy across channels.** While fostering customer loyalty and trust, Pega Customer Decision Hub allows better coordination and optimization of marketing efforts at the composite organization, leading to increased efficiency, improved targeting, and better results.
- **Data science efficiencies.** Pega Customer Decision Hub's advanced analytics capabilities and machine learning algorithms further assist the composite organization with data exploration, visualization, and predictive modeling, enabling faster and more accurate data analysis.
- **Increased opportunity discovery.** Pega Customer Decision Hub's advanced analytics and reporting capabilities allow the composite to gain insights into its data, identify patterns and trends, and make data-driven decisions to improve customer experiences and outcomes.

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

- **Increased automation via generative AI (genAI).** Pega Customer Decision Hub's genAI features allow organizations to drive low-code productivity across developers, uncover opportunities while exploring data, create more dynamic personalized content, increase agent productivity, and transform chatbots to assist customers in self-service.

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

- **Licensing costs of \$11.6 million.** License fees are based on the type and number of cross-functional channels supported by Pega Customer Decision Hub and the number of customers and prospects.

- **Implementation and training costs of \$17.5 million.** Implementation involves a significant number of full-time employees (FTEs) from the IT and marketing organizations. Professional services are involved to help with the initial implementation and training. Training and change management are needed to help users adopt the Pega Customer Decision Hub platform.
- **Ongoing management costs of \$6.1 million.** Ongoing management involves testing, project management, offer configuration, development, and making enhancements to the Pega Customer Decision Hub platform.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$191.2 million over three years versus costs of \$35.3 million, adding up to a net present value (NPV) of \$155.9 million and an ROI of 442%.

Reduction in customer churn by Year 3

**15%**

“We are able to really centralize one-to-one customer engagement that focuses on the customer. We always look for what is relevant and valuable for the customer, as well as the value to the business.”

MANAGER OF OMNICHANNEL PERSONALIZATION, INSURANCE



Return on investment  
(ROI)

**442%**



Benefits PV

**\$191.17M**



Net present value  
(NPV)

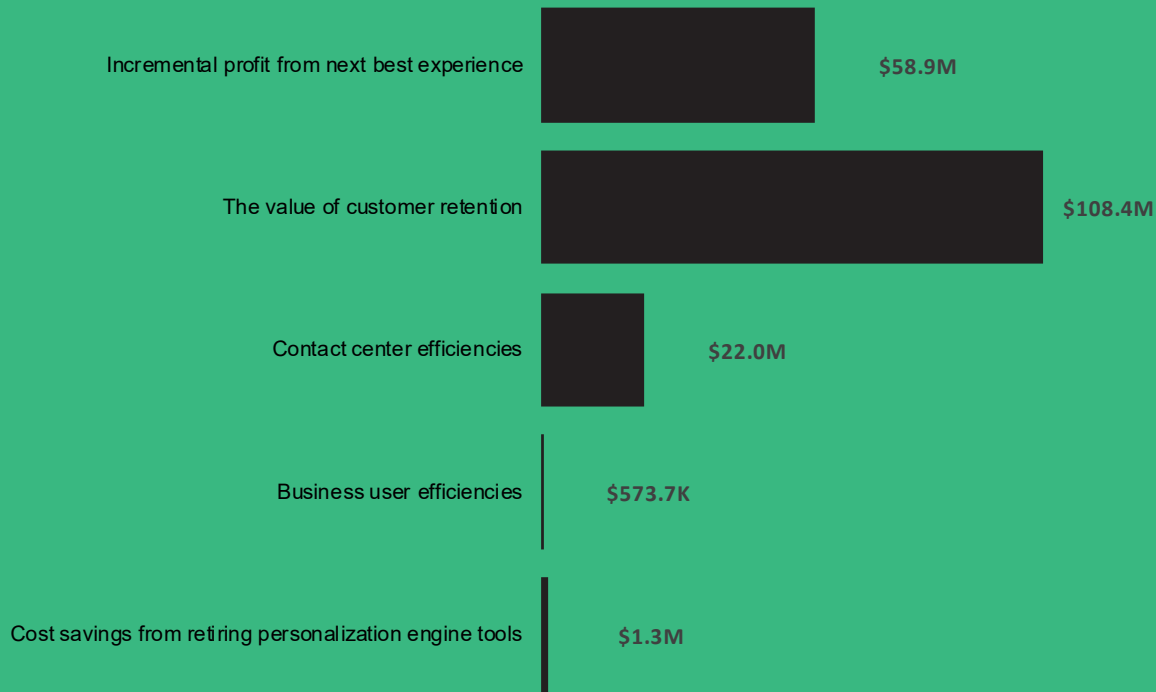
**\$155.89M**



Payback

**<6 months**

**Benefits (Three-Year)**





## 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 Pega Customer Decision Hub.

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 Pega Customer Decision Hub can have on an organization.

### DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Pega 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 Pega Customer Decision Hub.

Pega 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.

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

### Due Diligence

Interviewed Pega stakeholders and Forrester analysts to gather data relative to Pega Customer Decision Hub.

### Interviews

Interviewed four representatives at organizations and sent a questionnaire to nine other customers using Pega Customer Decision Hub to obtain data about 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.

# e Pega Customer Decision Hub Customer Journey

## Drivers leading to the Pega Customer Decision Hub investment

Interviews				
Role	Vertical sector	Geography	Annual revenue	Number of customers
Manager of omnichannel personalization	Insurance	HQ in the Netherlands; global operations	\$24.9 billion	10.2 million
Group product director	Financial services	HQ in the US; global operations	\$82.9 billion	70 million
Senior VP, customer management	Financial services	HQ in the US; global operations	\$21.5 billion	N/A
Product owner	Financial services	HQ in the US; global operations	\$79.8 billion	50 million

## KEY CHALLENGES

In their prior environments, interviewees used homegrown solutions as well as other decisioning tools across their marketing channels. The interviewees noted how their organizations struggled with common challenges, including:

- **Fragmented systems and siloed data.** Interviewees discussed how their prior environments were siloed across various departments, which led to disjointed marketing messages. When different functions or business units within the company operated independently, they often lacked coordination and consistency in marketing efforts, causing inconsistent customer experiences and ineffective messaging. This resulted in customers receiving repetitive or conflicting messages through various channels, leading to frustration and confusion. It also made it difficult to create a cohesive brand image and deliver personalized and targeted marketing campaigns.

The group product director at a financial services organization commented: “Our prior environment was a nightmare for the marketers, and it was really disjointed for the customers, which led to a really poor customer experience. For instance, a customer would call and say: ‘I just told the teller I’m not interested in that, yet I

received direct mail, two splashed campaigns, and four emails about it. So, are you not listening to me when I'm telling you that?' I think this just adds to really poor messages with your customers."

- **Missed cross-sell opportunities.** Interviewees highlighted missed opportunities stemming from inefficient and disjointed customer interactions in their prior environments. Due to the lack of a unified decisioning engine and fragmented marketing efforts, the interviewees were unable to optimize their customer interactions, identify cross-sell opportunities, and communicate effectively with customers across different product lines. This resulted in missed opportunities to engage and serve customers, leading to suboptimal customer experiences and, potentially, lost revenue.

The senior VP, customer management at a financial services organization commented, "We're able to present various offers or experiences with Pega to customers in different ways, and we're able to direct them now to a much better fulfillment experience than we could deliver with our prior environment."

- **Inefficient, manual processes.** Interviewees noted inefficient, manual processes in their prior environment that made it difficult for marketers to automate and scale their campaigns. They often relied on spreadsheets and manual planning, making it difficult to engage customers effectively with personalized messages at the right time and place. Additionally, some prior tools required programming languages that were time-consuming due to the manual nature of writing and executing queries.

The manager of omnichannel personalization at an insurance organization commented: "One of my personal ambitions was to always create marketing campaigns where the customer is the center of attention. It was necessary to invest in automation to help us because it would be impossible to create such an environment with our existing spreadsheet approach."

## INVESTMENT OBJECTIVES

The interviewees' organizations searched for a solution that could:

- Provide one-to-one customer engagement across a unified platform.

- Enhance the customer experience with greater relevancy and consistency.
- Identify cross-sell opportunities to increase customer lifetime value.
- Improve efficiency by automating manual tasks and streamlining processes.

“In our prior environment, we usually had to hand-crank or ‘guesstimate’ business values to determine the right next step or conversation, and we were limited to email or direct mail for delivery.”

GROUP PRODUCT DIRECTOR, FINANCIAL SERVICES

## COMPOSITE ORGANIZATION

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

**Description of composite.** A global, multibillion-dollar B2C financial services organization, the composite has an effective brand, global operations, 10 million customers, and a strong online and offline presence. The organization aims to develop great customer relationships over time and focuses on getting a higher share of wallet with existing customers.

**Deployment characteristics.** The organization deploys Pega Customer Decision Hub across its agent-assisted channels, online channels, and outbound channels.

**Key Assumptions**

\$25 billion in annual revenue

10 million customers

3,000 customer service representatives

13% operating margin

# 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	Incremental profit from next best experience	\$17,956,250	\$25,359,750	\$28,741,050	\$72,057,050	\$58,875,911
Btr	The value of customer retention	\$21,937,500	\$44,752,500	\$68,471,325	\$135,161,325	\$108,372,239
Ctr	Contact center efficiencies	\$3,818,880	\$8,592,480	\$15,275,520	\$27,686,880	\$22,049,656
Dtr	Business user efficiencies	\$114,075	\$266,175	\$332,719	\$712,969	\$573,661
Etr	Cost savings from retiring personalization engine tools	\$270,000	\$540,000	\$810,000	\$1,620,000	\$1,300,301
Total benefits (risk-adjusted)		\$44,096,705	\$79,510,905	\$113,630,614	\$237,238,224	\$191,171,768

## INCREMENTAL PROFIT FROM NEXT BEST EXPERIENCE

**Evidence and data.** Interviewees discussed the impact of Pega Customer Decision Hub as a comprehensive solution for enhancing customer experience and driving incremental profit. The platform employs real-time decisioning, analyzing customer data instantly to determine the most suitable offer, action, or experience based on individual preferences, behaviors, and context. Interviewees highlighted how Pega Customer Decision Hub uses predictive analytics to forecast customer behavior and identify revenue-generating opportunities for cross-selling, upselling, and retention. Interviewees noted that with Pega Customer Decision Hub's optimization algorithms, their organizations could continuously refine the next best experience based on ongoing customer interactions and outcomes, maximizing their potential for incremental profit.

- The group product director at a financial services organization described how efficient customer communications led to an impact on revenue: "By efficiently communicating with our customers, we focus on providing them with relevant items of interest to them. We avoid wasting impressions on item A when item B would provide more benefit to the customer, increase our customer lifetime value, or generate direct revenue through click-to-purchase. Through various models,

including those brought by Customer Decision Hub and Pega, we consistently observe a healthy 10% increase in revenue.”

- The senior VP, customer management at a financial services organization discussed how they improved credit card experiences through real-time decisioning, personalized offers, and enhanced fulfillment: “Regarding the surrounding total experience of applying for a credit card, we’ve been able to grow and benefit from that because now we’re able to do real-time decisioning with Pega.”

# \$652.1 million

Three-year incremental revenue from next best experience

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- Its annual revenue is \$25 billion in Year 1, with a year-on-year growth rate of 2% in Year 2 and in Year 3.
- With Pega, revenue increases by 0.65% in Year 1, 0.90% in Year 2, and 1.00% in Year 3.
- The operating margin is 13%.

**Risks.** Forrester recognizes that these results may not be representative of all experiences. The impact of this benefit will vary depending on an organization’s:

- Annual revenue.
- Operating margin.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$58.9 million.

# 1.00%

Increase in revenue as a result of Pega Customer Decision Hub in Year 3

“EBIT is the biggest KPI for us. From the get-go, we have seen Pega Customer Decision Hub uplift our incremental EBIT because of more timely and comprehensive decisions.”

PRODUCT OWNER, FINANCIAL SERVICES

Incremental Profit From Next Best Experience					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Annual revenue	Composite	\$25,000,000,000	\$25,500,000,000	\$26,010,000,000
A2	Revenue increase as a result of Pega Customer Decision Hub	Interviews	0.65%	0.90%	1.00%
A3	Incremental revenue attributable to Pega Customer Decision Hub	A1*A2	\$162,500,000	\$229,500,000	\$260,100,000
A4	Operating margin	Composite	13%	13%	13%
At	Incremental profit from next best experience	A3*A4	\$21,125,000	\$29,835,000	\$33,813,000
	Risk adjustment	↓15%			
Atr	Incremental profit from next best experience (risk-adjusted)		\$17,956,250	\$25,359,750	\$28,741,050
Three-year total: \$72,057,050			Three-year present value: \$58,875,911		



## THE VALUE OF CUSTOMER RETENTION

**Evidence and data.** Interviewees highlighted how Pega Customer Decision Hub helped them with customer retention by leveraging data and advanced analytics to deliver personalized, relevant, and consistent experiences. The platform enabled their businesses to understand customer preferences, behaviors, and needs in real time, allowing them to make informed decisions to retain customers. Pega Customer Decision Hub's capabilities allowed their organizations to engage proactively with individual customers and provide them with personalized and fulfilling experiences — enhancing customer satisfaction, engendering loyalty, and increasing the likelihood of long-term retention.

- The manager of omnichannel personalization at an insurance organization shared the impact of Pega on retaining their customers who had tried canceling their policies via the website and were redirected to a contact center agent. They noted: “We also had a retention case where customers were canceling their insurance: We were able to [not only] change the channel for the customer from our website to our contact center with decisioning but also make the outcome of the next best action available within the contact center for the agent to know what decision was made on the website.”
- The senior VP, customer management at a financial services organization commented: “Customer retention is a key focus for us, and we employ Pega to holistically manage the customer lifecycle. From onboarding to cross-selling, we personalize experiences and messaging across channels to ensure a seamless and valuable customer journey. By prioritizing retention, we aim to build long-term relationships and drive business growth.”



# \$1.2 billion

Three-year avoided revenue loss

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- Its annual revenue is \$25 billion, and it has 10 million customers in Year 1. Both its annual revenue and number of customers increase by 2% year on year in Year 2 and Year 3.
- Prior to Pega Customer Decision Hub, the composite's customer churn rate was 15%. With Pega Customer Decision Hub, customer churn is reduced by 5% in Year 1, 10% in Year 2, and 15% in Year 3.
- The operating margin is 13%.

**Risks.** Forrester recognizes that these results may not be representative of all experiences. The impact of this benefit will vary depending on an organization's:

- Annual revenue and number of customers.
- Customer churn rate.
- Operating margin.

**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 \$108.4 million.

# 15%

Reduction in churn rate by Year 3 with Pega

“Customers are able to cancel their insurance on the website, but we prefer them to call us. We were able to redirect 40% of potential cancellations to our contact center, and we retained 85% of the callers.”

MANAGER OF OMNICHANNEL PERSONALIZATION, INSURANCE

The Value Of Customer Retention					
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Annual revenue	A1	\$25,000,000,000	\$25,500,000,000	\$26,010,000,000
B2	Number of customers	Composite	10,000,000	10,200,000	10,404,000
B3	Customer churn rate in prior environment	Interviews	15%	15%	15%
B4	Reduction in customer churn rate with Pega	Interviews	5%	10%	15%
B5	Number of customers retained each year with Pega	B2*B3*B4	75,000	153,000	234,090
B6	Average annual revenue per customer	B1/B2	\$2,500	\$2,500	\$2,500
B7	Avoided revenue loss with Pega Customer Decision Hub	B5*B6	\$187,500,000	\$382,500,000	\$585,225,000
B8	Operating margin	Composite	13%	13%	13%
Bt	The value of customer retention	B7*B8	\$24,375,000	\$49,725,000	\$76,079,250
	Risk adjustment	↓10%			
Btr	The value of customer retention (risk-adjusted)		\$21,937,500	\$44,752,500	\$68,471,325
Three-year total: \$135,161,325			Three-year present value: \$108,372,239		

### CONTACT CENTER EFFICIENCIES

**Evidence and data.** Interviewees noted how Pega Customer Decision Hub enhances contact center efficiencies through intelligent routing, knowledge management, automation, personalization, and analytics. Pega Customer Decision Hub helped them direct customer inquiries to the most suitable agents, reducing call transfers and wait times as well as equipping agents with relevant customer data and next-best-action recommendations to provide personalized service experiences. Interviewees noted how personalization based on customer data allowed agents to deliver tailored experiences, which helped improve overall customer satisfaction. Furthermore, analytics and reporting from the platform helped provide valuable insights for optimizing contact center operations and driving continuous improvement.

The product owner at a financial services organization described the impact that Pega had on their contact center: “From a channel perspective, our approach is primarily digital with a branch presence, and we also utilize real-time emails. With the addition of an IVR [interactive voice response] system and call center, we aim to achieve complete coverage for marketing, ensuring a comprehensive and seamless customer experience.”

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- It has 3,000 customer service representatives, who average 40 interactions per day.
- Pega Customer Decision Hub helps address 30% of customer interactions in Year 1, 45% in Year 2, and 60% in Year 3. This scaling represents the impact of further efficiencies gained with more usage of the platform.
- Prior to Pega, the average handle time is 15 minutes. With Pega, the composite sees a 10% reduction in average handle time in Year 1, a 15% reduction in Year 2, and a 20% reduction in Year 3.
- The fully burdened rate per minute for a customer service representative is \$0.32.

**Risks.** Forrester recognizes that these results may not be representative of all experiences. The impact of this benefit will vary depending on:

- The number of customer service representatives.
- The average number of customer interactions per representative per day.
- The fully burdened rate per minute for a customer service representative.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$22.0 million.

Contact Center Efficiencies					
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Number of customer service representatives	Composite	3,000	3,000	3,000
C2	Average number of customer interactions per representative per day	Composite	40	40	40
C3	Total number of customer interactions per year	$C1 \times C2 \times 260$	31,200,000	31,200,000	31,200,000
C4	Percentage of customer interactions Pega is able to help address	Composite	30%	45%	60%
C5	Average handle time prior to Pega (minutes)	Interviews	15	15	15
C6	Percent reduction in average handle time with Pega	Interviews	10%	15%	20%
C7	<b>Subtotal: Total minutes saved on average handle time with Pega</b>	$C3 \times C4 \times C5 \times C6$	<b>14,040,000</b>	<b>31,590,000</b>	<b>56,160,000</b>
C8	Fully burdened rate per minute for a customer service representative	Composite	\$0.32	\$0.32	\$0.32
Ct	Contact center efficiencies	$C7 \times C8$	\$4,492,800	\$10,108,800	\$17,971,200
	Risk adjustment	↓15%			
Ctr	Contact center efficiencies (risk-adjusted)		\$3,818,880	\$8,592,480	\$15,275,520
<b>Three-year total: \$27,686,880</b>			<b>Three-year present value: \$22,049,656</b>		

# 20%

Reduction in average handle time by Year 3

“We can reduce the average call handling time, for instance, by using Pega to optimize our standard IVR menu, which will help reduce the number of agents the customer has to speak to.”

MANAGER OF OMNICHANNEL PERSONALIZATION, INSURANCE

## BUSINESS USER EFFICIENCIES

**Evidence and data.** Interviewees discussed how Pega Customer Decision Hub created efficiencies for business users across a variety of roles, from marketing operations to business analysts. They said Pega Customer Decision Hub helped teams streamline processes by automating and optimizing tasks to reduce manual effort and improve productivity. Furthermore, interviewees noted the intelligent decisioning capabilities of Pega Customer Decision Hub: Tools like Pega Ops Manager and Next Best Action Designer, powered by real-time data and advanced analytics, enabled quick and informed decision-making, provided them with the ability to deliver personalized experiences based on customer data, and enhanced customer satisfaction and engagement. The centralized platform for collaboration and communication enabled their organizations to facilitate seamless teamwork and workflow management.

- The product owner at a financial services organization described the impact of Pega Ops Manager in creating efficiencies: “The true scalability of our operations lies in the operational component. With Pega Ops Manager and its low-code environment, most of the coding happens in the background, making our processes more streamlined and efficient. Our weekly code review further enhances our efficiency and ensures we maintain high standards.”
- The senior VP, customer management at a financial services organization described the impact of more efficient campaign management with Pega Customer Decision Hub: “I have many, many more people supporting the more manual outbound processes that aren’t integrated into Customer Decision Hub than I do supporting Customer Decision Hub. So it’s much more efficient to manage and deploy those experiences that we’re running through Customer Decision Hub, or in other words, fewer resources to support a much broader scale and a much bigger number of actions and treatments.”

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- It has 20 business users in Year 1, 35 business users in Year 2, and 35 business users in Year 3.
- With Pega Customer Decision Hub, business users experience a 15% increase in efficiency in Year 1, a 20% increase in Year 2, and a 25% increase in Year 3.
- The average fully burdened annual salary for a business user is \$84,500.

**Risks.** Forrester recognizes that these results may not be representative of all experiences. The impact of this benefit will vary depending on:

- The number of business users.
- The average fully burdened annual salary for a business user.

**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 \$574,000.

Business User Efficiencies					
Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Number of business users	Composite	20	35	35
D2	Increase in efficiencies with Pega Customer Decision Hub	Interviews	15%	20%	25%
D3	Fully burdened annual salary for a business user	Composite	\$84,500	\$84,500	\$84,500
D4	Productivity recapture	TEI methodology	50%	50%	50%
Dt	Business user efficiencies	$D1 \times D2 \times D3 \times D4$	\$126,750	\$295,750	\$369,688
	Risk adjustment	↓10%			
Dtr	Business user efficiencies (risk-adjusted)		\$114,075	\$266,175	\$332,719
Three-year total: \$712,969			Three-year present value: \$573,661		

# 25%

Increase in efficiencies with Pega Customer Decision Hub by Year 3

“We now can refocus marketing resources on effective content creation and efficient delivery, which is an area where we’ve struggled. By streamlining operations, we were able to increase productivity across roles.”

GROUP PRODUCT OWNER, FINANCIAL SERVICES



## COST SAVINGS FROM RETIRING PERSONALIZATION ENGINE TOOLS

**Evidence and data.** Interviewees discussed how Pega Customer Decision Hub's comprehensive platform helped them retire other solutions. By consolidating systems onto the Pega platform, interviewees were able to reduce costs associated with licensing, maintenance, and custom integrations. They also noted how Pega Customer Decision Hub's low-code development approach empowered business users to build and customize applications, reducing their reliance on specialized IT resources and lowering development costs. They said that Pega Customer Decision Hub's scalability and flexibility allowed them to retire solutions that weren't scalable or no longer met their evolving needs, consolidating operations onto a single, robust platform.

The manager of omnichannel personalization at an insurance organization described the maintenance cost savings that their IT team made: "The focus shifts toward system maintenance rather than constantly building new channels or actions, resulting in cost savings and improved efficiency."

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- It saves \$300,000 in costs from retiring personalization engine tools in Year 1, \$600,000 in Year 2, and \$900,000 in Year 3.

**Risks.** Forrester recognizes that these results may not be representative of all experiences. The impact of this benefit will vary depending on:

- The cost of personalization engine tools that Pega enables an organization to retire.
- An organization's ability to use Pega to displace other large, homegrown solutions. This may result in higher cost savings.

**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 \$1.3 million.

Cost Savings From Retiring Personalization Engine Tools					
Ref.	Metric	Source	Year 1	Year 2	Year 3
E1	Cost savings from retiring personalization engine tools	Interviews	\$300,000	\$600,000	\$900,000
Et	Cost savings from retiring personalization engine tools	E1	\$300,000	\$600,000	\$900,000
	Risk adjustment	↓10%			
Etr	Cost savings from retiring personalization engine tools (risk-adjusted)		\$270,000	\$540,000	\$810,000
Three-year total: \$1,620,000			Three-year present value: \$1,300,301		

# \$1.3 million

Cost savings from retiring personalization engine tools

“We’ve been able to sunset three other decision engines within the enterprise.”

GROUP PRODUCT OWNER, FINANCIAL SERVICES

## UNQUANTIFIED BENEFITS

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

- **A unified marketing strategy across channels.** Interviewees discussed the impact of Pega Customer Decision Hub on creating a unified marketing strategy across channels, which provided their organizations with a consistent brand message and customer experience. They said that while fostering customer loyalty and trust, the platform enabled better coordination and optimization of marketing efforts, leading to increased efficiency, improved engagement, and better results.

The manager of omnichannel personalization at an insurance organization commented: “Something that is very successful is the evolution of our newsletter. Previously, we had a pretty traditional newsletter that we sent out monthly to all customers, with a central team that would decide what articles to put in it. Now we have a completely dynamic newsletter optimized for particular segments, where the adaptive models decide what articles individual customers will see.”

- **Data science efficiencies.** Interviewees noted how Pega Customer Decision Hub helped their data analysts become more efficient by providing them with a unified platform that integrates data from various sources, automates data preparation tasks, and enables seamless collaboration with team members. They said that its advanced analytics capabilities and machine learning algorithms helped with data exploration, visualization, and predictive modeling, enabling faster and more accurate data analysis.

The senior VP, customer management at a financial services organization commented: “Just as an example, we have 600+ automated models running through Adaptive Decisioning; without it, we would have to build and deploy those models manually. Now, since we’ve automated a lot of that with Customer Decision Hub, they’re able to shift to things like building machine learning capabilities to assess various aspects and characteristics of our branches.”

- **Increased opportunity discovery.** Interviewees highlighted that Pega Customer Decision Hub increased their visibility into insights-driven opportunities by

providing a centralized and real-time view of customer data across multiple systems and channels. They said that its advanced analytics and reporting capabilities allowed them to gain insights into their data, identify patterns and trends, and make data-driven decisions to improve customer experiences and outcomes.

The group product owner at a financial services organization commented: “We really do appreciate the vast amount of data that Pega has been able to capture, including interaction history, and how we’ve been able to use that for modeling, understanding customer behavior, and creating greater business transparency.”

“With Pega Customer Decision Hub, marketers can focus on building new actions, creating new campaigns, and optimizing existing campaigns, instead of the more repetitive, manual work of ad hoc campaigns. It’s a fully automated marketing system now.”

MANAGER OF OMNICHANNEL PERSONALIZATION, INSURANCE

## FLEXIBILITY

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

- **Increased automation with genAI.** Interviewees highlighted that they will be able to unlock further efficiencies with Pega’s genAI functionality. This will allow their organizations to drive low-code productivity across developers, uncover

opportunities while exploring data, create more dynamic personalized content, increase agent productivity, and transform chatbots to assist customers in self-service. Furthermore, interviewees expected to use operational data to accelerate work and give executives end-to-end visibility.

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

“We are also looking into genAI functionality that Pega is currently building into the system, with the possibility for integrating it with existing applications across our organization. It will give us a lot of opportunities to automate processes that can supersede manual, time-consuming work.”

MANAGER OF OMNICHANNEL PERSONALIZATION, INSURANCE

# Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Ftr	Licensing costs	\$0	\$3,675,000	\$5,250,000	\$5,250,000	\$14,175,000	\$11,624,155
Gtr	Implementation and training costs	\$5,913,380	\$8,913,960	\$2,323,640	\$2,103,640	\$19,254,620	\$17,517,840
Htr	Ongoing management costs	\$0	\$1,980,000	\$2,750,000	\$2,750,000	\$7,480,000	\$6,138,843
	Total costs (risk-adjusted)	\$5,913,380	\$14,568,960	\$10,323,640	\$10,103,640	\$40,909,620	\$35,280,838

## LICENSING COSTS

**Evidence and data.** Interviewees noted that annual recurring license fees are based on the type and number of marketing channels supported by Pega Customer Decision Hub and the number of customers and prospects. Pricing may vary. Contact Pega for additional details.

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- It has \$3.5 million in licensing costs in Year 1, \$5.0 million in Year 2, and \$5.0 million in Year 3. This represents the scaling usage of Pega Customer Decision Hub across channels.

**Risks.** Forrester recognizes that these results may not be representative of all experiences. The impact of this benefit will vary depending on:

- The number of marketing channels that Pega Customer Decision Hub supports.
- The number of customers.
- The number of prospects.

**Results.** To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$11.6 million.

Licensing Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Pega Customer Decision Hub licensing costs	Composite		\$3,500,000	\$5,000,000	\$5,000,000
Ft	Licensing costs	F1		\$3,500,000	\$5,000,000	\$5,000,000
	Risk adjustment	↑5%				
Ftr	Licensing costs (risk-adjusted)		\$0	\$3,675,000	\$5,250,000	\$5,250,000
Three-year total: \$14,175,000			Three-year present value: \$11,624,155			

## IMPLEMENTATION AND TRAINING COSTS

**Evidence and data.** Interviewees described their Pega Customer Decision Hub implementation as a gradual process that required involvement from their IT and marketing organizations to outline the transition plan, run integrations with multiple channels, and develop and implement new marketing strategies. Interviewees noted the involvement of professional services to help with platform design, the initial integration, best practices, and training on the Pega platform. They also needed change management initiatives to encourage users to adopt the platform and to prepare marketing teams to best support the new approach to customer interactions.

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- It pays \$1.0 million in professional services/partner fees in the initial implementation, \$1.5 million in Year 1, \$1.0 million in Year 2, and \$800,000 in Year 3.
- Sixty-five FTEs from both IT and the business (marketing, customer relations, or operations) are involved for six months to provide the initial implementation in the agent-assisted channel. In Year 1, they are involved with developing proper functionality for the full year. In Years 2 and 3, they are involved in expanding the deployment to additional channels, taking a total of two months' time each year. The fully burdened hourly rate for a business or IT FTE is \$48. The organization

## ANALYSIS OF COSTS

dedicates 20,000 hours to initial change management and Pega Customer Decision Hub training for the marketing and IT organizations.

- Prior to launch, 3,000 agents are trained on using Pega Customer Decision Hub for 3 hours; in the following years, each agent goes through 0.5 hours of additional training per quarter. The fully burdened hourly rate for a customer service/branch representative is \$19.

**Risks.** Forrester recognizes that these results may not be representative of all experiences. The impact of this benefit will vary depending on:

- Professional services/partner fees.
- The number of hours spent on planning, implementation, training, and change management.
- The average hourly rates for business/IT FTEs and customer service representatives.

**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 \$17.5 million.

Implementation And Training Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
G1	Professional services/partner fees	Composite	\$1,000,000	\$1,500,000	\$1,000,000	\$800,000
G2	Time spent on planning and implementation (hours)	Composite	67,600	135,200	20,800	20,800
G3	Time spent on initial training and change management (hours)	Composite	20,000			
G4	Fully burdened hourly rate for a business/IT FTE	Composite	\$48	\$48	\$48	\$48
<b>G5</b>	<b>Subtotal: Implementation and training costs</b>	<b>(G2+G3)*G4</b>	<b>\$4,204,800</b>	<b>\$6,489,600</b>	<b>\$998,400</b>	<b>\$998,400</b>
G6	Time spent training customer service/branch representatives (hours)	Composite	9,000	6,000	6,000	6,000
G7	Fully burdened hourly rate for a customer service/branch representative	Composite	\$19	\$19	\$19	\$19
<b>G8</b>	<b>Subtotal: Customer service/branch representative training costs</b>	<b>G6*G7</b>	<b>\$171,000</b>	<b>\$114,000</b>	<b>\$114,000</b>	<b>\$114,000</b>
Gt	Implementation and training costs	G1+G5+G8	\$5,375,800	\$8,103,600	\$2,112,400	\$1,912,400
	Risk adjustment	↑10%				



Gtr	Implementation and training costs (risk-adjusted)	\$5,913,380	\$8,913,960	\$2,323,640	\$2,103,640
Three-year total: \$19,254,620		Three-year present value: \$17,517,840			

“No one would call Pega Customer Decision Hub cheap, but I think when you look at everything from hardware to licensing to man hours, we run a smarter operation with fewer resources now than in the past.”

GROUP PRODUCT OWNER, FINANCIAL SERVICES

ONGOING MANAGEMENT COSTS

**Evidence and data.** Following the initial implementation, interviewees indicated that they have dedicated teams to work with Pega Customer Decision Hub full time. The size of these teams ranged between 20 and 30 FTEs.

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- A team of 18 business/IT FTEs supports Pega Customer Decision Hub in Year 1; this grows to 25 FTEs in Years 2 and 3. These resources dedicate 100% of their time to testing, project management, offer configuration, development, and making enhancements to the tool.
- The average fully burdened annual salary for a business/IT FTE is \$100,000.

**Risks.** Forrester recognizes that these results may not be representative of all experiences. The impact of this benefit will vary depending on:

- The number of FTEs managing Pega Customer Decision Hub.
- The average fully burdened annual salary of a business/IT FTE.

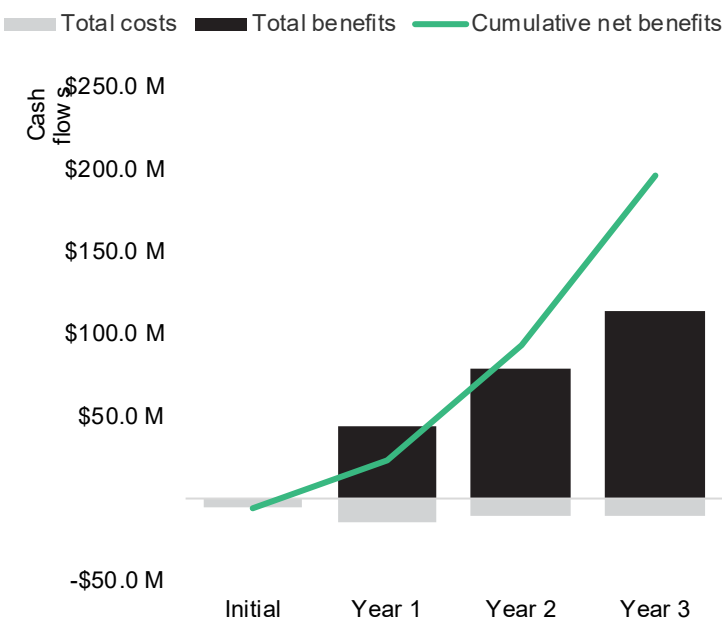
**Results.** To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$6.1 million.

Ongoing Management Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
H1	Number of FTEs managing Pega Customer Decision Hub	Interviews		18	25	25
H2	Fully burdened annual salary for a business/IT FTE	Composite		\$100,000	\$100,000	\$100,000
Ht	Ongoing management costs	H1*H2		\$1,800,000	\$2,500,000	\$2,500,000
	Risk adjustment	↑10%				
Htr	Ongoing management costs (risk-adjusted)		\$0	\$1,980,000	\$2,750,000	\$2,750,000
Three-year total: \$7,480,000			Three-year present value: \$6,138,843			

# Financial Summary

## Consolidated Three-Year Risk-Adjusted Metrics

Cash Flow Chart (Risk-Adjusted)



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.

The financial results calculated in the Benefits and Costs sections can be used to determine the ROI,

Cash Flow Analysis (Risk-Adjusted Estimates)						
	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$5,913,380)	(\$14,568,960)	(\$10,323,640)	(\$10,103,640)	(\$40,909,620)	(\$35,280,838)
Total benefits	\$0	\$44,096,705	\$79,510,905	\$113,630,614	\$237,238,224	\$191,171,768
Net benefits	(\$5,913,380)	\$29,527,745	\$69,187,265	\$103,526,974	\$196,328,604	\$155,890,930
ROI						442%
Payback period (months)						<6

## **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."

### **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.

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.

## APPENDIX B: ENDNOTES

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<sup>1</sup> Source: [The State Of Real-Time Interaction Management, 2024](#), Forrester Research, Inc., June 21, 2024.

<sup>2</sup> 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.



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