FORRESTER®

The Total Economic Impact™ Of Oracle Digital Assistant

Cost Savings And Business Benefits
Enabled By Oracle Digital Assistant

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Executive Summary

> Oracle Digital Assistant allows enterprise organizations to significantly reduce internal and external interactions, enabling cloud-based, AI-driven efficiencies to internal employee-facing communications teams and external customer call centers and thereby improving both employee and customer experiences.

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

ODA is a cloud-based virtual assistant platform that allows organizations to automate internal and external interactions. Customers can quickly implement ODA with out-of-the-box templates while continuously enhancing scripts to optimize communications. With internal AI capabilities, data sets, and training, ODA enables analysts to identify common key phrases and questions, allowing them to fine-tune customized responses over time. Migrating to an automated digital channel allows teams to deflect inquiries that previously required human interaction, offering teams operational efficiencies and an enhanced experience for the end user. To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five customers with experience using ODA. For the purposes of this study, Forrester aggregated the experiences of the interviewed customers and combined the results into a single composite organization.

Prior to using ODA, inquiries were handled through traditional channels — primarily telephone, email, and messaging — all requiring human interaction.

KEY STATISTICS

Return on investment (ROI)
181%

Net present value (NPV)
$4.34M

The exchanges were often repetitive and time-consuming for both the inquirer and responder.

After the investment in ODA, internal and external communications teams found that they could deflect a significant percentage of common questions on the streamlined digital channel, realizing operational efficiencies and enabling teams to focus more on higher-value queries that require human intervention. Customers also gained the ability to collect and analyze data surrounding typical questions, allowing teams to modify and improve templates as needed to better address end-user needs.

Savings from reassignment of externally facing customer service specialists:

$5.3 million

KEY FINDINGS

Quantified benefits. Risk-adjusted present value (PV) quantified benefits include:

- **Efficiencies from increased internal agent deflections.** With ODA integrated for first-line human resources (HR) inquiries, customers avoid the need for internal HR specialists to handle frequently asked questions. Further, with embedded AI technology and the ability to integrate other knowledge sources, HR teams can easily anticipate, modify, and customize template language to better address common HR-related employee issues, offering additional efficiencies. The three-year, risk-adjusted PV savings due to efficiencies from increased internal agent deflections total $1.45 million for the composite organization.

- **Reassignment of external-facing customer service specialists**. Upon implementing ODA, interviewees reported that the volume of customer inquiries made via traditional channels decreased substantially, substantially allowing their organizations to reassign customer service specialists. ODA's ability to identify trends and key phrases allows analyst teams to make real-time adjustments to template language, improving the intent match rate, enhancing the end-user experience, and allowing for growth in digital inquiry volume. The three-year, risk adjusted PV of savings due to the reassignment of customer service agents is $5.3 million.

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

- **Improved intent match rate.** ODA customers realized a continuous improvement in their query resolution rate, indicating that the digital assistant is training in a way that is helpful to end users. The flexibility and intelligence in the platform also allowed teams to easily identify opportunities for improvement of AI models and customization of templates to address questions more quickly and accurately.

- **Enhanced employee productivity.** As ODA can handle the more mundane, repetitive queries, internal HR specialists could concentrate on higher-value tasks and inquires, improving job satisfaction. Additionally, employees with HR-related questions now had a way to quickly get answers anytime on a streamlined, digital

> **"With Oracle Digital Assistant, our customer service team is much more efficient. We are seeing a serious reduction in handle time on traditional channels."**
>
> — Head of people systems, airline

channel, promoting productivity gains. They no longer needed to wait until business hours to access personal HR information or to have an issue resolved.

- **More robust reporting and analytics.** With conversations now digitized, communications teams could see and evaluate interactions, facilitating timely template and language improvements. Teams also used ODA data to better manage channel resources and make smarter strategic decisions.

- **Increased scalability.** A cloud-based solution, ODA seamlessly integrates with other applications and content sources, and the team's ability to continuously improve the intent match rate allowed organizations to easily handle contact volume growth.

- **Improved customer experience.** ODA enabled customer service teams to accurately identify pain points in a digital customer exchange that could be refined to improve future sessions. By utilizing the solution's built-in templates, embedded AI tools, and analytics capabilities, teams can improve the overall customer experience, evidenced by increases in customer satisfaction (CSAT) scores.**.** Risk-adjusted PV

realized a per-session cost of $0.037. Note that pricing is based on an organization's size and use case. The resulting three-year, risk-adjusted PV of annual subscription costs for an organization of 25,000 employees totals $1.8 million.

- **Initial and ongoing costs.** Initial costs, modeled on an accelerated rollout of use cases, include internal FTE hours required for implementation, internal training, and outside professional services. The ongoing costs represent analytical and coding support as well as improving training models, partnership management and communications. The three-year, risk-adjusted PV of initial and going costs equals $595,000.

The customer interviews and financial analysis found that a composite organization experiences benefits of $6.73 million over three years versus costs of $2.40 million, adding up to a net present value (NPV) of $4.34 million and an ROI of 181%.

Efficiencies from increased internal agent deflections:

$1.4 million

costs include:

- **Annual subscription costs.** For internal-facing use, enterprise organizations incurred an average per-employee cost of $2.00 per month**.** For external customer-facing use, organizations
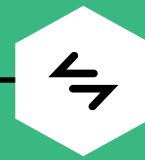
ROI
181%

BENEFITS PV
$6.73M

NPV
$4.34M

PAYBACK
<6 months

Benefits (Three-Year)

Efficiencies from increased internal agent deflections — **$1.4M**

Reassignment of external-facing customer service specialists — **$5.3M**

CSAT Score Improvement
One customer realized a 5.5-point increase in two months.

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 Oracle Digital Assistant.

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 Oracle Digital Assistant can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Oracle 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 Oracle Digital Assistant.

Oracle 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.

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

DUE DILIGENCE
Interviewed Oracle stakeholders and Forrester analysts to gather data relative to Oracle Digital Assistant.

CUSTOMER INTERVIEWS
Interviewed five decision-makers at organizations using Oracle Digital Assistant 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 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.

■ Drivers leading to the ODA investment

Interviews		
Role	**Industry**	**Organization Description**
Senior director of HRIS	Healthcare	US-based with over 90,000 employees
Digital team manager	Digital mobile	Team of 16 customer service specialists
Head of people systems	Airline	Europe-based with 5,500 impacted employees
HR product owner	Food and insurance retail	More than $10 billion revenue
Customer support supervisor	Outdoor equipment manufacturer	US-based with 50 years in operation

KEY CHALLENGES

The interviewed decision-makers reported that their teams previously managed inquiries through traditional channels, including telephone, email, and messaging. Their communications teams spent much of their time fielding repetitive, frequently asked questions. Management did not have the tools required to understand the nature and quantity of the interactions, and therefore could not make informed strategic decisions to improve performance.

The organizations struggled with common challenges, including:

- **Insufficient support for call center teams.** Lacking automated assistance, the call centers were overwhelmed with inquiries and were often unable to respond to the demand. Teams spent excessive time fielding redundant questions and not giving enough attention to more complex queries. This model resulted in frustration and low employee satisfaction.

- **Limited metrics surrounding requests and inquiries.** Absent an established call center tracking and reporting system, management was unable to resolve obvious pain points. They sought to relieve overburdened communication

channels; however, they lacked the information required to address weaknesses in the system.

> **"Before ODA, it was really hard to even have a sense for what types of questions were being asked. We couldn't see where the biggest needs were and where we had opportunities to connect and communicate better with our employees."**
>
> *Senior director of HRIS, healthcare*

- **The need to reduce costs and increase automation.** To remain competitive, interviewees reported the need to streamline certain interactions. They sought to reduce time spent on routine issues and delegate members to higher-value tasks. Lacking automation, teams had difficulty responding properly to seasonal call volume increases. Further, they did not have access to a single, integrated source of knowledge, leading to additional inefficiencies.

"After adopting ODA, we were able to provide quicker, 24/7 service with fewer resources. Frontline employee inquiries are now handled automatically, and our efficiencies have improved as a result."

HR product owner, food and insurance retail

"We chose ODA primarily because it already had the HCM [human capital management] skills. There was already prebuilt functionality. We were able to quickly integrate the application and enjoy the benefits without having to develop anything from scratch."

Senior director of HRIS, healthcare

SOLUTION REQUIREMENTS/ INVESTMENT OBJECTIVES

The interviewees' organizations searched for a solution that could:

- Increase efficiencies for internal and external communications teams, eliminating unnecessary human interaction without compromising service level and performance.

- Provide AI-capable, cloud-based support, prebuilt functionality, and customizable templates.

- Integrate with existing content applications.

- Offer relevant metrics to continuously improve performance.

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 five companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

- The composite is a US-based enterprise in the consumer goods industry.

- The organization's annual revenue totals $5 billion.

- The organization employs 25,000 people.

- The composite adopts ODA for both internal HR inquiries and external-facing customer questions.

- Employees impacted by ODA are 30 external customer service agents, 20 internal HR specialists, and one product manager.

Key assumptions
- **US-based consumer goods enterprise**
- **$5 billion revenue**
- **25,000 employees**
- **ODA implemented for internal HR use and external-facing customer use**

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	Efficiencies from increased internal agent deflections	$393,750	$603,750	$787,500	$1,785,000	$1,448,582
Btr	Reassignment of external-facing customer service specialists	$1,620,000	$2,160,000	$2,700,000	$6,480,000	$5,286,401
	Total benefits (risk-adjusted)	$2,013,750	$2,763,750	$3,487,500	$8,265,000	$6,734,983

EFFICIENCIES FROM INCREASED INTERNAL AGENT DEFLECTIONS

Evidence and data. The interviewees revealed the following about their organizations' use of ODA:

- ODA gives organizations the ability to streamline inquiry resolution for internal and external communications teams. Interviewees experienced a high level of adaptation in a short amount of time, signifying the willingness of end users to migrate many of their queries to a digitized format. The head of people systems at the airline noted: "We hardly have any calls now. Almost everything is coming through the Oracle assistant."

- The deflection rate continues to improve over time as ODA's AI capabilities are employed to learn more about the linguistic characteristics of common inquiries. Teams are also able to create changes and modify templates based on new visibility into the behavior of inquirers. With these capabilities, the interviewees said they expected that efficiencies will continue to increase with time. The product owner for a food and insurance retail organization noted, "We have seen ODA contacts steadily increase and our tier one contacts significantly decrease since we implemented ODA."

> **"ODA is fantastic at deflection. We have it set up to intercept and resolve the most common reasons for people to contact us. We have found a big difference in the number of calls requiring a human. Many calls are not even reaching the call center anymore."**
>
> *Digital team manager, digital mobile*

Modeling and assumptions. For the financial analysis, Forrester assumes:

- Agent deflections total 75,000 in Year 1, 115,000 in Year 2, and 150,000 in Year 3.

- HR specialists save 10 minutes per deflection upon adoption of ODA.

- The fully burdened hourly rate of an HR specialist is $35.

Risks. Efficiencies from increased internal agent deflections will vary with:

- The volume of HR inquiries in the organization's legacy state.

- The number of deflections realized based on the nature of the inquiries.

- The hourly rate of the HR specialist, depending on skill level and geographical location.

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 more than $1.4 million.

Efficiencies From Increased Internal Agent Deflections					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Agent deflections per year	Interviews	75,000	115,000	150,000
A2	Minutes saved per deflection	Interviews	10	10	10
A3	Fully burdened hourly rate of a human resources specialist	TEI standard	$35	$35	$35
At	Efficiencies from increased internal agent deflections	A1*(A2/60)*A3	$437,500	$670,833	$875,000
	Risk adjustment	↓10%			
Atr	Efficiencies from increased internal agent deflections (risk-adjusted)		$393,750	$603,750	$787,500
Three-year total: $1,785,000			Three-year present value: $1,448,582		

REASSIGNMENT OF EXTERNAL-FACING CUSTOMER SERVICE SPECIALISTS

Evidence and data. The interviewees revealed the following about their organizations' use of ODA:

- With ODA deployed, many common inquiries no longer require human interaction, leading to the reassignment of customer service specialists to roles in which they can perform higher-value work. A digital team manager commented: "Now that ODA can answer many basic questions, we were able to reassign 30 full-time agents from our contact center to other roles within the organization. This has been a huge cost savings for my unit."

- Interviewees reported that the ability to provide customers with a digitized communication channel has directly resulted in an improved customer experience. "We were getting a lot of

"ODA is fantastic at deflection. We have it set up to intercept and resolve the most common reasons for people to contact us. We have found a big difference in the number of calls requiring a human. Many calls are not even reaching the call center anymore."

Digital team manager, digital mobile

requests from customers who preferred a virtual assistant to the phone or email. We knew it was time to start modernizing our systems to be more

automated," reported the digital team manager at a digital mobile organization, adding, "ODA has allowed us to reach our highest CSAT score ever, increasing over 5% in just two months."

Modeling and assumptions. For the financial analysis, Forrester assumes:

- Thirty customer service specialists are reassigned in Year 1, increasing by 10 in Years 2 and 3, respectively.

- The average fully burdened annual salary of a customer service specialist is $67,500.

Risks. The reassignment of external-facing customer service specialists will vary with:

- The size of the customer service team in the organization's legacy environment.

- The salary level of a customer service specialist, depending on their skill set and geographical location.

> **"We had 13,000 conversations in the first three weeks of implementation. I would conservatively estimate that at least 20% of those would have been calls requiring a human."**
>
> *Senior director of HRIS, healthcare*

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of nearly $5.3 million.

Ref.	Metric	Source	Year 1	Year 2	Year 3
Reassignment Of External-Facing Customer Service Specialists					
B1	Number of customer service specialists reassigned within the organization	Interviews	30	40	50
B2	Fully burdened annual salary of a customer service analyst	TEI standard	$67,500	$67,500	$67,500
Bt	Reassignment of external-facing customer service specialists	B1*B2	$2,025,000	$2,700,000	$3,375,000
	Risk adjustment	↓20%			
Btr	Reassignment of external-facing customer service specialists (risk-adjusted)		$1,620,000	$2,160,000	$2,700,000
	Three-year total: $6,480,000		Three-year present value: $5,286,401		

UNQUANTIFIED BENEFITS

Additional benefits that customers experienced but were not able to quantify include:

- **Improved intent match rate.** Through AI engineering, the ODA solution identifies weaknesses in existing template language, allowing teams to quickly resolve issues according to an organization's needs. The digital teams manager at a digital mobility company commented, "As user behavior is learned and incorporated into our ODA design, we see continuous improvement in the match rate."

- **Enhanced employee productivity.** Since the adoption of ODA, interviewees reported an improved employee experience and corresponding productivity gains. Communications team members spent less time on mundane, redundant query resolution and more time designing the virtual assistant to better serve their teams. The digital teams manager mentioned: "Using the digital assistant has generated a lot of excitement among the team members, who actually refer to ODA as another team member. Everyone feels a little bit of ownership over its performance, which is fantastic."

  End-user employees were equally satisfied as their questions were answered more quickly. Moreover, employees appreciated having 24/7 access to basic HR information that they previously had to track down by phone or email during business hours. The head of people systems at an airline said, "Our employees now have the full capability to access and control their HR information at any time with the support of ODA."

- **More robust reporting and analytics.** ODA gives communications team managers quantitative metric data regarding all inquiries submitted through the virtual assistant. An HR product owner reported: "The accurate digital data removes any potential bias that an HR advisor might have. Instead, ODA offers hard data with which meaningful decisions can be made," adding, "With ODA, we are monitoring conversations, understanding what those conversations and questions are, and making sure we are answering them. With this information, we can make better decisions in the future — not just about ODA, but about how we build our documentation and how we communicate."

- **Increased scalability.** The ability to integrate ODA with existing applications allows for seamless collaboration and information sharing, especially when scaling with other Oracle solutions. With this digital shift, organizational growth does not require additional resources.

- **Improved customer experience.** ODA allows organizations to survey customers and utilize the results to further enhance ODA design and development. The digital team manager at a digital mobile organization said, "We switched our email to pass through ODA in September, and our CSAT rate went up 5% by November," adding, "With customer experience metrics available, we are able to fine-tune the customer journey in order to make it as seamless as possible."

FLEXIBILITY

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

- **Additional customer service enhancements.** As the digital assistant continues to learn and improve with time, interviewees reported seeing new opportunities to leverage the solution. The digital team manager at a digital mobile organization commented: "My feeling with ODA is that there is a lot of potential that we're not yet

using. We hope to eventually use ODA to streamline many more needs of our customers, like checking orders, repairs, refunds, subscription reminders, etc."

- **More integrated HR automation.** Beyond handling end-user employee inquiries, organizations hope to utilize ODA for employee onboarding, recruiting, and training. "Our roadmap is to continue to train ODA and build more common queries to support our frontline HR team. We are even in early conversations about how ODA can help support operational colleague queries that don't traditionally sit within HR," noted an HR product manager, who added, "The more we work with ODA, the fewer resources we need, both within the company as well as to support the solution itself."

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

Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Ctr	Annual subscription cost	$0	$713,724	$724,469	$737,363	$2,175,556	$1,801,566
Dtr	Initial and ongoing costs	$226,119	$148,429	$148,429	$148,429	$671,407	$595,241
	Total costs (risk-adjusted)	$226,119	$862,153	$872,898	$885,792	$2,846,963	$2,396,807

ANNUAL SUBSCRIPTION COST

Evidence and data. The interviewees revealed the following about their organizations' use of ODA:

- Interviewees discussed the use of ODA for internal HR inquiries and external-facing customer inquiries.

- Oracle charges a per-employee fee for internal use and a per-session fee for external use.

Modeling and assumptions. For the financial analysis, Forrester assumes:

- The organization employees 25,000 people and incurs a subscription cost of $24 per employee per year.

- ODA handles 1,320,000 external sessions in Year 1,1,584,000 in Year 2, and 1,900,800 in Year 3. The organization pays $0.037 per session.

Risks. Annual subscription cost will vary with:

- The size and needs of the organization and the resulting number of internal and external sessions.

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 $1.8 million.

> **"With ODA, we can see what types of questions come up and make strategic decisions accordingly. For example, I may need to move resources from one area to another, or I may need to raise a recruitment requisition. Those are just some of the key things."**
>
> *Head of people systems, airline*

Annual Subscription Cost							
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
C1	Number of employees	Composite		25,000	25,000	25,000
C2	Cost per employee per year	$2/month*12		$24	$24	$24
C3	Subtotal: cost for internal use	C1*C2		$600,000	$600,000	$600,000
C4	Number of external sessions	Interviews		1,320,000	1,584,000	1,900,800
C5	Cost per session	Interviews		$0.0370	$0.0370	$0.0370
C6	Subtotal: cost for external use	C4*C5		$48,840	$58,608	$70,330
Ct	Annual subscription cost	C3+C6	$0	$648,840	$658,608	$670,330
	Risk adjustment	↑10%				
Ctr	Annual subscription cost (risk-adjusted)		$0	$713,724	$724,469	$737,363
	Three-year total: $2,175,556			**Three-year present value: $1,801,566**		

INITIAL AND ONGOING COSTS

Evidence and data. The interviewees revealed the following about their organizations' use of ODA:

- For an accelerated deployment of two use cases, initial implementation required one product manager and three developers, responsible for understanding the business-specific use cases and making sure to integrate those into the initial ODA setup. A small amount of internal training was necessary.

- Outside professional services were contracted to accelerate the implementation and deployment.

- One product owner and one developer performed the ongoing analytical and coding support, enabling teams to constantly improve training data.

- A team was responsible for ongoing management of the tool, including updates and internal communications, requiring a few hours per month.

> **"Between ODA and the two people who update it and maintain it, they are doing what used to take 30 people to do, and our volume has increased at the same time. The adaptation of ODA has made a lot of sense costwise for us."**
>
> *Digital team manager, digital mobile company*

Modeling and assumptions. For the financial analysis, Forrester assumes:

- The implementation effort includes one product manager earning $135,000 per year and three developers earning $101,250 per year for six months at 60% dedicated time.

- The initial cost of professional services is $60,000, and the initial internal training totals $5,000.

- Ongoing analysis and coding require 50% dedicated time of one product owner earning $135,000 per year and 50% dedicated time of one developer earning an annual salary of $101,250.

- Ongoing management requires 16 hours per month at $57 per hour.

Risks. Initial and ongoing costs will vary with:

- The size and nature of the organization and the related scope of the ODA deployment.

- The skill level and experience of the employees involved in the implementation and ongoing management.

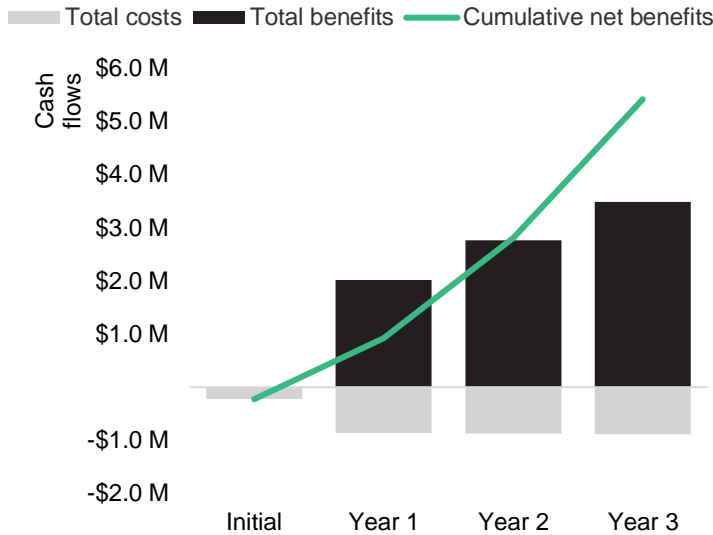- The salary levels, depending on skill set and geographical location.

Results. To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV of $595,000.

Initial And Ongoing Costs

Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
D1	Implementation effort	Interviews	$131,625			
D2	Professional services	Interviews	$60,000			
D3	Initial training	Interviews	$5,000			
D4	Ongoing analytical and coding support	Interviews		$118,125	$118,125	$118,125
D5	Ongoing management (includes updates and communications)	Interviews		$10,944	$10,944	$10,944
Dt	Initial and ongoing costs	D1+D2+D3+D4+D5	$196,625	$129,069	$129,069	$129,069
	Risk adjustment	↑15%				
Dtr	Initial and ongoing costs (risk-adjusted)		$226,119	$148,429	$148,429	$148,429
	Three-year total: $671,407			**Three-year present value: $595,241**		

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)

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

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

Cash Flow Analysis (Risk-Adjusted Estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	($226,119)	($862,153)	($872,898)	($885,792)	($2,846,963)	($2,396,807)
Total benefits	$0	$2,013,750	$2,763,750	$3,487,500	$8,265,000	$6,734,983
Net benefits	($226,119)	$1,151,597	$1,890,852	$2,601,708	$5,418,037	$4,338,176
ROI						181%

Prior to the deployment of ODA, the interviewees' organizations lacked the resources and automation required to respond efficiently to all employee and customer inquiries. Additionally, inquiry tracking was difficult, leaving management unable to effectively direct team efforts. Post-deployment, customers experienced operational efficiencies, supported by an immediate deflection rate of 20% on redundant inquiries and enabling teams to reduce internal costs, reassign agents, and strategically focus on more challenging employee inquiries and customer issues. Interviewees also realized an enhanced customer experience, highlighted by a 5.5-point increase in one organization's CSAT score.

In this TEI analysis, Forrester created a composite organization that uses ODA for both human resources and customer communications teams. Given the assumptions based on responses from five ODA customers, Forrester calculated a risk-adjusted ROI of 181% and an NPV of $4.3 million over three years. It is important to note that an organization with an extended implementation timeline or a deployment under more challenging legacy conditions may not yield the same benefits. On the other hand, organizations that scale ODA beyond the two use cases described in this study could streamline additional processes, gain further efficiencies, and promote organizationwide collaboration and flexibility.

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.

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