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The Total Economic Impact™ Of EdgeVerve AssistEdge RPA Platform
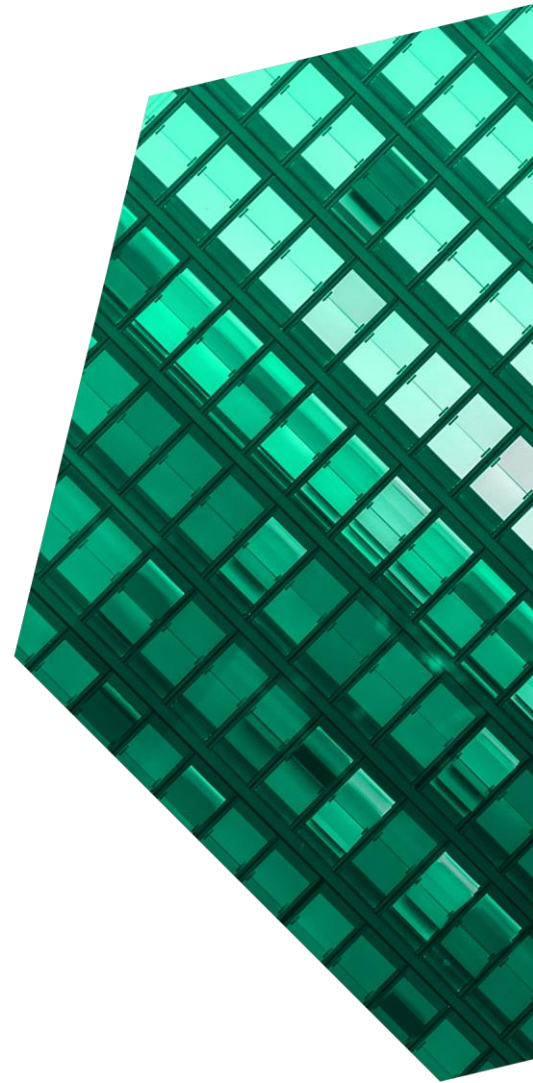
Cost Savings And Business Benefits
Enabled By AssistEdge RPA

JANUARY 2021

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Executive Summary

> The need for efficiency and quality delivery has brought a distinct value for robotic process automation (RPA) among companies today. Embracing automation to manage repeatable and error-prone tasks has transitioned companies to realize a broad range of use cases across business functions such as finance, HR, and customer service. This study will explore the impact of one such organization's RPA journey with the EdgeVerve AssistEdge RPA Platform.

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

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed an organization with experience using the AssistEdge RPA platform. Forrester used this experience to project a three-year financial analysis.

The EdgeVerve customer's finance BPM operations, managed by Infosys. Given the level of manual operations required in their finance tasks, the customer developed a mandate to eliminate, simplify, standardize, and automate processes, and looked to Robotic Process Automation as one of the key enablers of their automation journey.

After investing in the EdgeVerve AssistEdge platform, the customer saw significant impact on the efficiency of their finance operations, and realized cost savings through the elimination of FTE hours across 220 use cases.

After investing in the EdgeVerve AssistEdge platform, the customer has been able to automate almost 31% of their Infosys BPM finance workforce.

KEY STATISTICS

Return on investment (ROI)
110%

Net present value (NPV)
$8,716,290

KEY FINDINGS

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

- **Average handling time of payroll posting reduced by 72%.** RPA implementation saw BPM staff eliminate a total of 49,348 hours across three years in payroll posting processes. Cumulatively, this productivity gain saw a net present value of $993,137 over a three-year period.

- **Faster and more effective cash collections saw 30% average reduction in time spend.** Automated dunning process with RPA especially from the second year of the RPA program, saw a total of 21,320 hours eliminated in the cash collections processes.

- **An average of 11 FTEs automated across three years from account reconciliation activities.** Standardizing and automating reconciliation processes saw an average of 65% of time saved on this task for the customer's accounting teams, incurring a net present value of $1,386,959 over a three-year period.

- **Over a three-year period, the customer saw a 31% automation rate with its BPM operations.** The organization was able to enable automation across a total of 220 use cases, including the four called out separately in this report. Across its remaining 216 use cases, this customer saw a net present value of $9,639,525 from FTE hours automated.

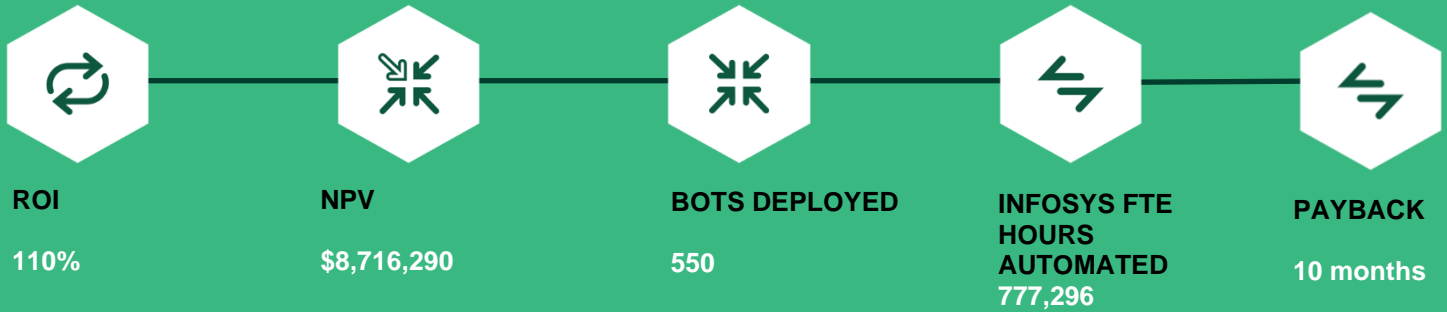**Unquantified benefits.** Benefits that are not quantified for this study include:

- **Standardization of processes.** The customer leveraged RPA implementation to standardize processes across finance operations. Due to RPA, running compliance or changes over process requires a less amount of time and effort, and builds better structure. Through the RPA implementation, 59% of use cases involved complete standardization, while a further 25% saw partial standardization.

- **Change management processes to optimize RPA solutions.** The customer also established a broader ESRA (Eliminate, standardize, right-source and automate) strategy in its organization to identify the processes that RPA would most be suited for. This included identifying processes that can be eliminated, simplifying the existing processes, standardize across regions and then looking at what can be automated. Within the automation phase RPA was one of the enablers that the customer used.

- **Boost in employee morale.** Due to elimination of FTEs involved in repeatable tasks, BPM staff were able to move towards more value-added tasks, boosting morale and skills.

- **Integration and collaboration across Infosys ecosystem.** The involvement of the Infosys BPM operations and implementation teams, working alongside the client and EdgeVerve AssistEdge was able to provide the broader effort and collaborations needed to deliver the success of this program.

Costs. Risk-adjusted PV costs include:

- **Infrastructure, licensing and maintenance support.** Infrastructure and maintenance, as well as licensing across a majority of attended bots and remaining unattended bot implementation, saw a net present value cost of $4,295,849.

- **Ongoing operations and maintenance support.** Dedicated staff across Infosys BPM and EdgeVerve teams were needed for operations, product support. This also required consistent effort from a core group of the customer's IT managers for project management, bringing in an additional cost of $3,627,352.

The customer interview and financial analysis derive a three-year present value of total benefits of $16,639,491 over three years versus costs of $7,923,201 providing net benefits of $8,716,290 and a ROI of **110%**.

ROI

110%

NPV

$8,716,290

BOTS DEPLOYED

550

INFOSYS FTE HOURS AUTOMATED

777,296

PAYBACK

10 months

Benefits (Three-Year)

	$9.6M
$993.1K	
$417.0K	
$1.4M	
$4.2M	

Cost savings from productivity in payroll posting | Cost savings from cash collections process | Cost saving from productivity in reconciliation process | Cost saving in productivity in quality checks | Cost savings from automated FTEs
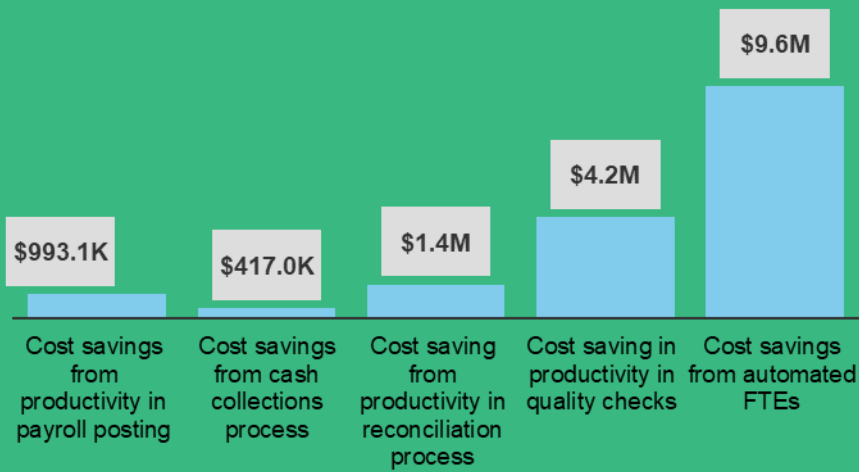
> **RPA implementation allowed for automation of tasks across 220 use cases in finance BPM operations, including automation, elimination, and standardization of processes. The automated FTE hours and productivity gains from this implementation enabled cost savings for the customer.**

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 the AssistEdge RPA platform.

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 the AssistEdge RPA platform can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by EdgeVerve 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 report to determine the appropriateness of an investment in the AssistEdge RPA platform

EdgeVerve and Infosys BPM 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.

EdgeVerve provided the customer name for the interview but did not participate in the interview.

DUE DILIGENCE
Interviewed EdgeVerve stakeholders and Forrester analysts to gather data relative to the AssistEdge RPA platform.

CUSTOMER INTERVIEW
Interviewed decision-makers at an organization using the AssistEdge RPA platform to obtain data with respect to costs, benefits, and risks.

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

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

The EdgeVerve AssistEdge RPA Customer Journey

Drivers leading to the AssistEdge RPA platform investment

INTERVIEWED ORGANIZATION

Forrester interviewed Royal Philips, an EdgeVerve AssistEdge customer with the following characteristics:

- Royal Philips is a global leader of healthcare technology headquartered in Europe.

- Manages finance operations through Infosys BPM, employing 1,200 Infosys employees across finance processes.

- Philips collaborated with Infosys BPM to deploy 550 EdgeVerve AssistEdge bots across a three-year implementation timeframe.

KEY OBJECTIVES FROM RPA IMPLEMENTATION

Philips adopted a Hoshin strategy to eliminate, simplify, standardize, and automate finance operations processes.

As part of this strategy, Philips identified robotic process automation (RPA) as one of the approaches to automation. Through RPA, Philips was looking to enable the following:

- Automation of 1 million work hours in finance operations over three years of deployment

- Efficient, improved, and consistent performance across finance operations

- Centralized BPM operations and enable end-to-end automation across finance operations domain

CUSTOMER RPA JOURNEY

Philips had an established partnership with Infosys BPM in handling its finance operations. As Philips looked to expand its automation capabilities, it worked with EdgeVerve and Infosys BPM to define strategic use cases for RPA implementation, within the existing Infosys BPM functions. Based on design principles, and change management, standard processes for RPA were defined and implemented from 2018 for the customer.

For this use case, Forrester has modeled benefits and costs over three years.

Key assumptions
- **1,200 Infosys BPM staff in finance operations**
- **200 BPM staff in collections department; 60 in accounting operations**
- **Blended average hourly cost of Infosys BPM staff is $25**
- **Main use case of RPA implementation was in BPM functions of Philips' finance operations**

Analysis Of Benefits

■ Quantified benefit data

Total Benefits

Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Cost savings from productivity in payroll posting	$296,400	$489,739	$424,509	$1,210,648	$993,137
Btr	Cost savings from cash collections process	$0	$254,410	$275,144	$529,554	$416,976
Ctr	Cost saving from productivity in reconciliation process	$391,258	$646,446	$661,531	$1,699,234	$1,386,959
Dtr	Cost saving in productivity in quality checks	$1,185,600	$1,958,957	$2,004,624	$5,149,181	$4,202,894
Etr	Cost savings from automated FTEs	$1,284,400	$3,884,470	$7,003,166	$12,172,037	$9,639,525
	Total benefits (risk-adjusted)	$3,157,658	$7,234,022	$10,368,974	$20,760,654	$16,639,491

COST SAVINGS FROM PRODUCTIVITY IN PAYROLL POSTING

From the customer interview, we understood that one of the use cases that RPA was implemented for was in automating the payroll posting process. After standardizing the operating procedure and enabling attended bots, the automation of payroll posting saw the following benefits.

- The organization saw average handling time for this process reduce by 72% by the third year of the RPA program, allowing the employees in payroll processing function move on to more value-added activities.

- With automation of this process, Philips was able to eliminate 16,449 hours of its Infosys BPM staff hours on average across the three years.

Modeling and assumptions. The calculation of this benefit saw considered the following assumptions.

- The Infosys BPM staff operated across Poland, China, Manila and India for Philips finance operations. With most of the RPA benefits incurred among the BPM staff in India, a blended

average hourly cost of $25 was considered for Infosys BPM staff, with an assumed inflation rate of 3% every year.

- The elimination of hours will imply a gradual decrease in Infosys FTEs required for the accounting team across the use cases. However, accounting for not complete productivity conversion of eliminated hours, means that the rate of reduction will not be exact to the hours eliminated per year.

Risks. In this calculation, Forrester also assumes the following risks:

- Estimations in average handline time considerations by the customer.

- Estimations of benefits realization across the three year program.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $993,137.

	Cost savings from productivity in payroll posting						
Ref.	**Metric**	**Calculation**	**Year 1**	**Year 2**	**Year 3**	**Total**	**Present Value**
A1	Number of employees in accounting	Customer	60	55	45		
A2	Percentage of time spend on payroll posting before RPA implementation	Assumption	25%	25%	25%		
A3	Number of hours spent on payroll posting before RPA implementation	A1*A2*2080	31,200	26,600	23,400		
A4	Percentage reduction in average handling time after RPA implementation	Customer	40%	70%	72%		
A5	Hours eliminated	A3*A4	12,480	20,020	16,848		
A6	Average labor cost per hour	Year 1: Assumption Year 2 and 3: A6py*(1+3%)	$25	$26	$27		
At	Cost savings from productivity in payroll posting	A5*A6	$312,000	$515,515	$446,851	$1,274,366	$1,045,408
	Risk adjustment	↓5%					
Atr	Cost savings from productivity in payroll posting (risk-adjusted)		$296,400	$489,739	$424,509	$1,210,648	**$993,137**

COST SAVINGS FROM IMPROVED CASH COLLECTIONS PROCESS

Standardization and efficiencies from the AssistEdge RPA implementation, also enabled better success in cash collections by the staff working on the order to cash process.

- With AssistEdge RPA, manual process by finance staff prompting and reminding stakeholders about cash collections had been automated. This allowing for a much more streamlined practice in cash collections process, and in-some cases faster and better collections.

- In select instances, because of the standardized reminders, the customer was able to gather up to $6 million in cash collections in a shorter timeframe than before the RPA implementation.

- The benefits in time savings on the cash collections process from automation was realized from the second year of the RPA implementation, collectively eliminating 21,320 FTE hours from the cash collections process across two years.

Modeling and assumptions. This benefit calculation assumes the following:

- The blended average hourly rates would adhere to industry standard of $25.

- Based on figures garnered and interview with customer, FTEs would spend an average of 10% of their time on this process across the three years.

- The elimination of FTE hours on this task would in-turn eliminate the number of staff partaking in this function, and gradually reduce the base of employees performing this task over the years

To account for risks and assumptions made on hourly rates and accuracy of customer calculations on hours eliminated, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of $416,976.

Cost savings from cash collections process							
Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total	Present Value
B1	Number of Infosys staff working on order-to-cash process	Customer	200	200	150		
B2	Percentage of time spend on cash collections	Assumption		10%	10%		
B3	Hours spent on cash collections before RPA implementation	Assumption		41,600	31,200		
B4	Percentage reduction in time spend on cash collections after RPA implementation	Customer		25%	35%		
B5	Hours eliminated from cash collections after RPA implementation	B3*B4		10,400	10,920		
B6	Average labor cost per hour	Year 1: Assumption Year 2 and 3: B6py*(1+3%)	$25	$26	$27		
Bt	Cost savings from cash collections process	B5*B6		$267,800	$289,626	$557,426	$437,922
	Risk adjustment	↓5%					
Btr	Cost savings from cash collections process (risk-adjusted)			$254,410	$275,144	$529,554	**$416,976**

COST SAVING FROM PRODUCTIVITY GAINS IN RECONCILIATION PROCESS

Another key RPA use case for the accounting team was in enabling quicker account reconciliation, which typically took about one-third of the accounting operations team's time.

- With RPA implementation on the reconciliation process, transactions could be completed within 20 minutes, allowing the accounting operations team to realize an average of 65% reduction in time spend across the three years.

- This allowed Philips to realize a total of 69,155 hours saved from the reconciliation process across the three years.

Modeling and assumptions. This quantified benefit considered the following assumptions:

- Blended average hourly rate of staff impacted to be $25, with compounded inflation incorporated.

- Given FTE hours automated across use cases for this team, we would assume a gradual reduction in total staff across year 2 and 3.

- The benefit from this use case is gradually realized, with most benefit coming through in year 2 and 3.

- Considering these assumptions and possible discrepancies in the estimated calculations from the customer, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of $1,386,959.

Cost saving from productivity in reconciliation process

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total	Present Value
C1	Number of employees in accounting	Customer	60	55	45		
C2	Percentage of time spend on reconciliation before RPA implementation	Customer	33%	33%	33%		
C3	Number of hours spent on data quality checks per annum before RPA implementation	C1*C2*2080	41,184	37,752	30,888		
C4	Percentage of time saved in reconciliation after RPA implementation	Customer	40%	70%	85%		
C5	Hours eliminated on reconciliation process	C3*C4	16,474	26,426	26,255		
C6	Average labor cost per hour	"Year 1: Assumption Year 2 and 3: C6py*(1+3%)"	$25	$26	$27		
Ct	Cost savings from productivity in reconciliation process	C5*C6	$411,850	$680,470	$696,348	$1,788,668	$1,459,957
	Risk adjustment	↓5%					
Ctr	Cost saving from productivity in reconciliation process (risk-adjusted)		$391,258	$646,446	$661,531	$1,699,234	$1,386,959

COST SAVING IN PRODUCTIVITY IN QUALITY CHECKS

One of the key tasks that needed to be performed by the project accounting team, was in conducting data checks and cleansing of the finance data received and processed.

- With EdgeVerve RPA, the customer enabled 21 AssistEdge RPA bots to review data postings on a continuous basis and replace manual work for data cleansing and sanity checks.

- Automating a time-intensive task, AssistEdge enabled 85% of time savings on this process by year 3 of the RPA implementation.

Modeling and assumptions. This quantified benefit considered the following assumptions:

- The saving in FTE hours is also leading to a reduced base of accounting operations staff over the years.

- The accounting staff considered in this base are also dividing their time across the other use cases across finance and accounting operations.

- The benefit from this use case is gradually realized, with most benefit coming through in year 2 and 3.

- Considering these assumptions and possible discrepancies in the estimated calculations from the customer, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of $4,202,894.

Cost saving from productivity in quality checks

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total	Present Value
D1	Number of employees in accounting	Customer	60	55	45		
D2	Percentage of time saved on data quality checks	Customer	40%	70%	85%		
D3	Hours eliminated on data quality checks per annum	D1*D2*2080	49,920	80,080	79,560		
D4	Average BPM hourly cost	"Year 1: Assumption Year 2 and 3: A3py*(1+3%)"	$25	$26	$27		
Dt	Cost saving in productivity in quality checks	D3*D4	$1,248,000	$2,062,060	$2,110,130	$5,420,190	$4,424,099
	Risk adjustment	↓5%					
Dtr	Cost saving in productivity in quality checks (risk-adjusted)		$1,185,600	$1,958,957	$2,004,624	$5,149,181	$4,202,894

COST SAVING FROM AUTOMATED FTES

For Philips, the major use case for RPA implementation was in the automation of FTE hours across their finance operations. This was measured holistically across the remaining 216 use cases that implemented RPA, simplification, and standardization of processes. The automation across these remaining use cases incurred the following benefits for the Philips:

- Across the automation of the remaining 216 use cases, there was a total of 220 Infosys FTEs saved from finance operations. This incurred a cumulative cost saving of more than $10.1 million across the three years of implementation

- Beyond the four key use cases highlighted in the report above, Philips was able to see a remaining 212 Infosys BPM FTEs automated.

- Considering all 220 use cases, Philips incurred a 31% rate of automation from their Infosys BPM staff in their finance operations. This considers the 374 total FTEs saved from Infosys BPM from the original base of 1,200 employees.

Modeling and assumptions. This specific quantified benefit considered the following assumptions:

- Base of staff considers the balance of finance operations; sans use cases in the above benefit categories.

- Benefits realized gradually with 25% of the automation benefits realized in year 1, 70% in year 2 and 100% realization factor in year 3.

- Blended average hourly rate across Infosys BPM and the customer's internal staff managing finance operations of $25.

- Considering these assumptions and possible discrepancies in the estimated calculations from the interviews, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of $9,639,525.

Cost savings from automated FTEs across remaining use cases

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total	Present Value
E1	Number of Infosys staff in Phillips BPM across rest of finance operations	Customer	1,200	1,057	827		
E2	Rate of automation of FTE hours after RPA implementation	Customer	9%	7%	4%		
E3	Number of Infosys FTEs saved after RPA implementation from remaining use cases	Customer	104	73	35		
E4	Hours saved after RPA implementation	E3*2080	216,320	151,840	72,800		
E5	Cost of FTE hours	"Year 1: Assumption Year 2 and 3: E5py*(1+3%)"	$25	$26	$27		
E6	Cost savings on Infosys FTEs automated across remaining use cases	E4*E5	$5,408,000	$3,909,880	$1,930,838		
E7	Benefit realization factor	Assumption	25%	70%	100%		
E8	Total cost savings for each year	E6*E7	$1,352,000	$2,736,916	$1,930,838		
Et	Cost savings from automated FTEs	Etpy-1+E11	$1,352,000	$4,088,916	$7,371,754	$12,812,670	$10,146,868
	Risk adjustment	↓5%					
Etr	Cost savings from automated FTEs (risk-adjusted)		$1,284,400	$3,884,470	$7,003,166	$12,172,037	$9,639,525

UNQUANTIFIED BENEFITS

Additional benefits that the customer experienced but was not able to quantify include:

- Standardization of operating procedures was a significant benefit the customer experienced because of the RPA implementation. Change management and compliance activities now only required review of one process, as opposed to the four to five processes for each function that needed to occur before.

- Automation enabled business resilience, especially for critical finance functions of the customer's organization, amid remote working restrictions during the COVID-19 pandemic.

- Employees were able to move on to more value-added work instead of routine tasks, providing a more efficient finance organization as well as a better employee morale.

- The RPA implementation also benefitted from the collaboration across the EdgeVerve and existing Infosys BPM teams. Given the BPM team's longstanding relationship and understanding of the customer's finance operations could be leveraged for smooth implementation process and tracking.

FLEXIBILTY

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

- While the main use case for RPA implementation has been in the finance operations functions, the customer has also started using RPA across customer service and order management. This has the potential to further expand as procedures become more standardized.

- RPA has currently been implemented across extensive, routine tasks and processes. The process standardization that needs to occur for implementation will also bring clarity on needed process innovation across use cases in the future.

- The customer is also looking to augment RPA capabilities to include intelligent automation, using AI/ML to enable provisional accruals and automated maintenance.

Analysis Of Costs

■ Quantified cost data

| Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total Costs							
Ftr	Infrastructure, licensing and maintenance support	$0	$1,627,500	$1,785,000	$1,785,000	$5,197,500	$4,295,849
Gtr	Implementation and ongoing support	$136,500	$1,365,000	$1,405,950	$1,448,129	$4,355,579	$3,627,352
	Total costs (risk-adjusted)	$136,500	$2,992,500	$3,190,950	$3,233,129	$9,553,079	$7,923,201

INFRASTRUCTRE, LICENSING AND MAINTENANCE COST

The EdgeVerve RPA implementation for this customer involved infrastructure and maintenance costs across the attended bots and unattended bots' landscape.

- As RPA became more established across the finance operations, the bots grew to a total of 550 bots in year 3, with a majority in unattended mode.

- Infrastructure costs mainly involved a hosting on Azure cloud cost of $25,000 per month, incurring a $300,000 infrastructure cost for the bots gradually by year 2 and 3.

- Infrastructure maintenance would account to 20% of the licensing cost, amounting to $233,333 each year.

Modeling and assumptions. These cost calculations make the following assumptions:

- Some initial costs for set up only involved hosting, gradually builds with remaining effort costs for set-up absorbed by EdgeVerve.

- Initial costs incurred by the customer mainly denote to time and effort and some infrastructure set-up.

$4.3 million three-year cost PV — 54%
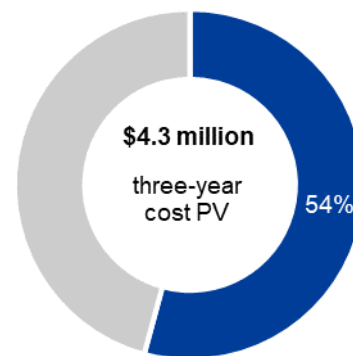
Licensing and maintenance are 54% of total costs

Risks. Considering the assumptions and the risks incurred in stability and consistency in bot management, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $4,295,849.

Infrastructure, licensing and maintenance cost

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total	Present Value
F1	Infrastructure cost	Customer	$50,000	$150,000	$300,000	$300,000		
F2	Licensing cost	Customer	$0	$1,166,667	$1,166,667	$1,166,667		
F3	Number of bots utilized	Customer		350	500	550		
F4	Infrastructure maintenance rate	Customer		20%	20%	20%		
F5	Annual maintenance cost	F2*F4		$233,333	$233,333	$233,333		
Ft	Infrastructure, licensing and maintenance support	F1+F2+F5	$0	$1,550,000	$1,700,000	$1,700,000	$4,950,000	$4,091,285
	Risk adjustment	↑5%						
Ftr	Infrastructure, licensing and maintenance support (risk-adjusted)		$0	$1,627,500	$1,785,000	$1,785,000	$5,197,500	$4,295,849

IMPLEMENTATION AND ONGOING SUPPORT

To assist with implementation and overall RPA implementation, the Infosys BPM team dedicated close to 50 staff members outside of the existing BPM staff to help with the implementation.

- The dedicated Infosys and EdgeVerve staff involved in implementation, product and operations support cost an average of $1.3 million every year across the three years.

**Modeling and assumptions.** The costing for this includes the following assumptions:

- This cost model is only considering the time and effort of the Infosys and EdgeVerve staff involved in the implementation and support

- A productivity conversion ratio of 50% was considered for the Infosys and EdgeVerve staff leading the implementation.

- Industry averages of hourly rate of $25 was used for the Infosys and EdgeVerve' s implementation staff.

  Risks. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of $3,627,352.

Implementation and ongoing support cost

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total	Present Value
G1	Average number of Infosys employees for implementation and operations support	Customer	5	50	50	50		
G2	Hours incurred by Infosys BPM support	G1*2080	10,400	104,000	104,000	104,000		
G3	Productivity conversion	Assumption	50%	50%	50%	50%		
G4	Net hours incurred by Infosys BPM support teams	G2*G3	5,200	52,000	52,000	52,000		
G5	Hourly rate of implementation and support staff	Assumption	$25	$25	$26	$27		
Gt	Implementation and ongoing support cost	G6+G12	$130,000	$1,300,000	$1,339,000	$1,379,170	$4,148,170	$3,454,621
	Risk adjustment	↑5%						
Gtr	Implementation and ongoing support cost (risk-adjusted)		$136,500	$1,365,000	$1,405,950	$1,448,129	$4,355,579	$3,627,352

Financial Summary

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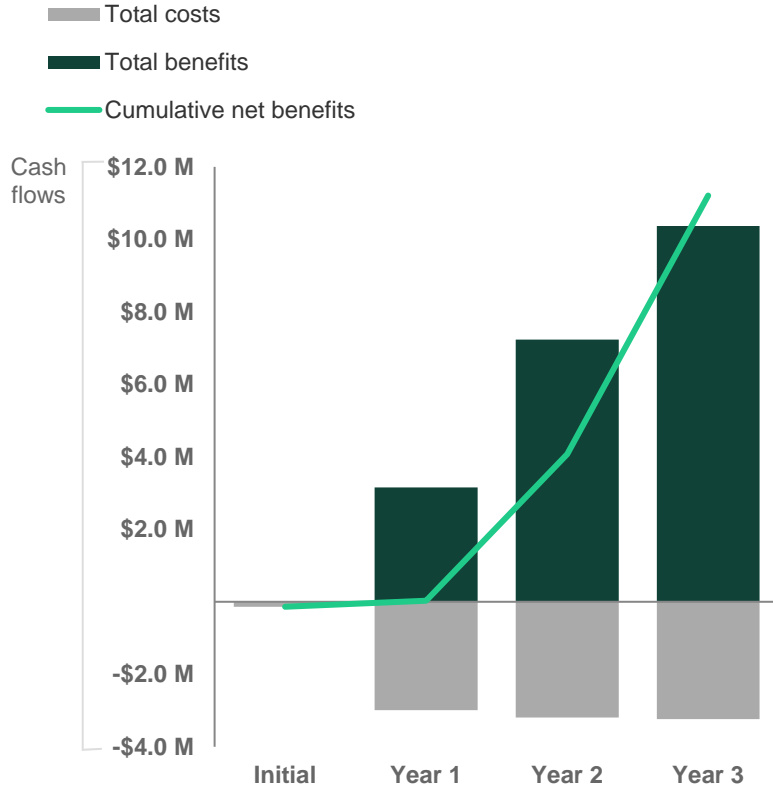
The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

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	($136,500)	($2,992,500)	($3,190,950)	($3,233,129)	($9,553,079)	($7,923,201)
Total benefits	$0	$3,157,658	$7,234,022	$10,368,974	$20,760,654	$16,639,491
Net benefits	($136,500)	$165,158	$4,043,072	$7,135,845	$11,207,575	$8,716,290
ROI						**110%**
Payback						10 months

Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.

PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.

NET PRESENT VALUE (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made, unless other projects have higher NPVs.

RETURN ON INVESTMENT (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.

DISCOUNT RATE

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.

PAYBACK PERIOD

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

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