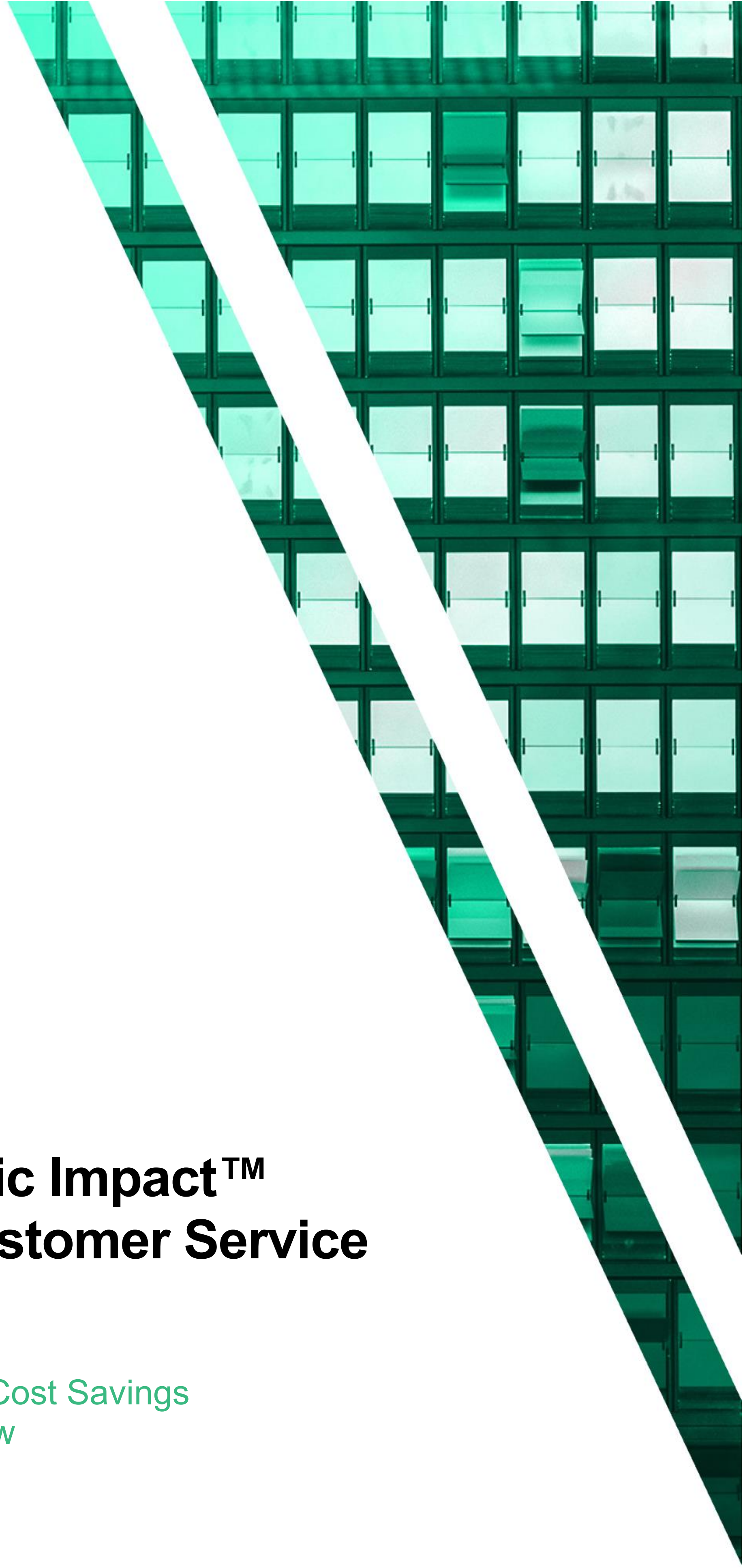

The Total Economic Impact™ Of ServiceNow Customer Service Management

Operational Efficiencies And Cost Savings Made Possible By ServiceNow

NOVEMBER 2020

A FORRESTER TOTAL ECONOMIC IMPACT™ STUDY COMMISSIONED BY SERVICENOW

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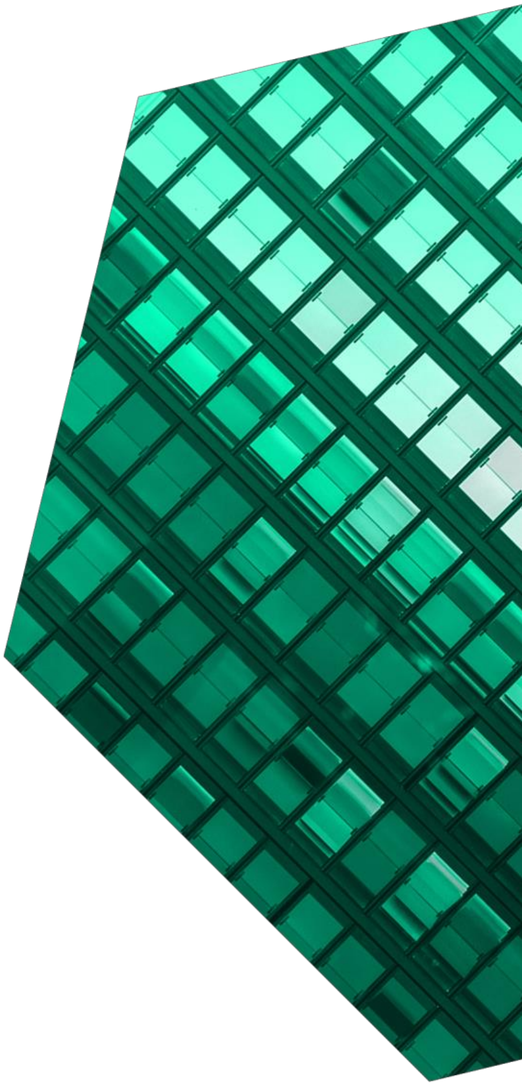


ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. For more information, visit forrester.com/consulting.

Executive Summary

ServiceNow® Customer Service Management increases efficiency for customer service agents and relieves other organizational departments of extraneous process steps spanning multiple platforms. Customer service sees fewer cases as a result of the workflow, automation, and self-help features from ServiceNow. But more importantly, agents can now address issues much faster while raising customer satisfaction scores.

In order to win customers over with unique and competitive differentiation, organizations need to focus on customer obsession. One main pillar of the customer-obsessed approach is providing excellent customer service, which is an expectation of many modern consumers. Many legacy customer service tools, which were often built or purchased for predigital transformation initiatives, do not provide the foundation necessary to adequately meet customers' needs in the digital age. To address this, organizations need a customer service solution that can scale, live in the cloud, break down company silos, and stitch together automated workflows.

ServiceNow Customer Service Management is a cloud-based customer service solution built for the modern, digital enterprise. Recently, Forrester Consulting was commissioned by ServiceNow to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Customer Service Management. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the ServiceNow solution on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four organizations with experience using ServiceNow Customer Service Management. For the purposes of this study, Forrester aggregated the experiences of the interviewed customers and combined the results into a single composite organization.

KEY STATISTICS

Return on investment (ROI)
176%

Net Present Value (NPV)
$8.75 million

Prior to adopting Customer Service Management, the businesses faced a myriad of challenges with legacy on-premises solutions. One issue was with the numerous disparate solutions that formed the foundation of their customer service platforms, sending agents hunting for information. Runaway costs of maintenance were also a problem, but of greater concern was that the lack of interconnectivity and scalability of these legacy tools hindered customer service agents from providing effective service quickly. With prior tools providing limited success, customers — the very people who these organizations needed to serve — were left with dismally poor experiences.

Following an investment in ServiceNow, multiple challenges were resolved. For example, manual processes were replaced with automated workflows, increasing operational efficiency for agents. Cases submitted through the phone channel were deflected, increasing the efficiency of other business units. The results speak for themselves: Customers were the greatest benefactors, and this was exemplified by greater retention percentages.

KEY FINDINGS

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

- **Addressing and resolving service requests early reduce case management operational costs for multiple departments.** Customer service agents gain efficiency with ServiceNow, and due to the support agents' increased ability to resolve cases on first contact, the cases no longer need to be escalated. First contact resolution (FCR) is improved by 20%, or 14 percentage points. Field service engineers, finance and billing departments, and IT engineers are all beneficiaries with fewer cases to manage. Service operations improvements, such as automated workflows and intelligent routing, allow for processes to be shortened, which also contributes to the FCR rate.

  Shift-left case adds efficiency gains in multiple departments:

  Up to 14%

  To further deflect issues, integration with the configuration management database (CMDB) and IT services and support allow for monitoring of services. The consolidated information on service components and subcomponents and the deployed customer configurations enables organizations to proactively manage and predict spikes in engineer utilization. Visibility between multiple business groups is enhanced, enabling faster resolution across the board. Following three years of use, the shifting left of cases and interdepartmental efficiency results in savings of $4.1M.

Phone contact case reduction

20% → 12%

- **Higher contact center efficiency due to modernized support request methods.** Using ServiceNow, organizations were able to shift support cases away from inbound phone cases to less expensive and sometimes zero-cost modes like email, web portal, or AI-driven self-service. Phone cases dropped 40% from previous levels, shifting the overall composition of phone cases from 20% to 12%. Email cases decreased by 72% due to the composite organization shifting to web-based services. And the reallocation of support cases resulted in greater efficiency for the contact center by generating $2.2M PV in savings over three years.

- **Improved customer satisfaction increases revenue retention.** In meeting customers with improved servicing and shorter response times, customer retention and in-turn, revenue retention, both improved by 0.75%. One of the interviewed organizations estimated that they were losing millions per year on lost support contracts, before even factoring in lost brand equity. For an enterprise that generates over $2B a year, this conservatively amounts to the retention of $5.2M PV over a three-year period.

- **Greater employee satisfaction decreases employee turnover and training costs.** Customer service organizations have historically faced high rates of turnover. By empowering agents with more relevant information and avoiding stressful repeat contacts, the cost to fill positions along with new hire training and ramp can be significantly reduced. Following a ServiceNow implementation, employee

> **ServiceNow was a natural fit with its out-of-the-box automation capabilities and standard ways to build a self-service customer portal. It helped us solve a lot of our problems, and we avoided having to invest a lot into building our own technology.**
>
> — Director of IT, core subject matter expert (SME), IT infrastructure org

experience (EX) scores are improved by 42%, leading to a three-year PV savings of $1.2M.

- **Operational costs for legacy customer service platforms are removed by rationalizing the stack.** Disparate legacy solutions necessitated external support contracts and internal FTEs to manage the technology. Operation expenses (opex) that are avoided result in annual savings of approximately 20% of the original legacy solution cost. This benefit brings a total savings of $895K PV over three years.

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

- **Beyond revenue retention, there exists the possibility of new revenue from non-support-based sales.** Sales groups have always had a bevy of tools to generate sales. With ServiceNow, the chances of additive product lines is easier to capture due to the information that gives salespeople a more holistic view of accounts, which equates to gaining a predictive edge on the best time to strike up a conversation.

Costs. Risk-adjusted PV costs include:

- **Total investment costs of Customer Service Management.** There are two main components to the investment: licensing costs and implementation. The total investment after three years of use comes to a $5M PV.

Forrester followed a standard process to collect data from interviews with four companies and created a composite organization. The subsequent Forrester financial analysis finds that the composite would experience benefits of $13.73M over three years versus costs of $4.98M, adding up to a net present value (NPV) of $8.75M and an ROI of 176%.

ROI
176%

BENEFITS PV
$13.73M

NPV
$8.75M

PAYBACK
<6 months

Benefits (Three-Year)

Contact centers realize significant gains by moving initial contact from humans to automated machine-based systems.

Cut down on extenuating requests that involve IT and finance by shifting left and resolving issues early.

Revenue retention improvement is the result of improved customer experience.

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 ServiceNow Customer Service Management.

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 Customer Service Management can have on an organization.

DUE DILIGENCE

Interviewed ServiceNow stakeholders and Forrester analysts to gather data relative to Customer Service Management.

CUSTOMER INTERVIEWS

Interviewed four decision-makers at organizations using ServiceNow Customer Service Management 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.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by ServiceNow 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 Customer Service Management.

ServiceNow 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.

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

The ServiceNow Customer Service Management Customer Journey

Drivers leading to the Customer Service Management investment

Interviewed Organizations

Industry and region	Previous situation	Interviewee	Number of agents
Software, Middle East, global	• Heavy reliance on phone contact • Cost per case upwards of $500	Customer operations lead	1,500+
Software, Americas, global	• 10 different CRM systems to manage support issues	Senior director of customer experience	~1,000
IT infrastructure, global	• Siloed disparate systems globally	Director of IT, core SME for ServiceNow	400+
Communications service provider, Europe	• Insufficient digital capabilities • High opex on legacy systems	Head of ICT service desk	1,000+

KEY CHALLENGES

Prior to considering an investment in ServiceNow Customer Service Management, the interviewed organizations struggled with common challenges, including:

- **High dependency on costly phone-based support.** Lacking fully functional customer portals and other self-servicing tools, customers would often choose to initiate support cases via the phone, which is the costliest method of support at a price of $40 per call. First contact resolution was also poor, causing support cases to result in additional phone contacts.

> **"Scalability was a big concern for us. We had business units in countries that operated in a very siloed way because of all the disparate on-premises systems. This goes beyond process too, as it was hard to offer a globally consistent experience for our major, global customers."**
>
> *Core SME, IT infrastructure org*

- **Scaling was near impossible across geographies with legacy solutions.** With disparate legacy implementations, scaling to serve multiple lines of business located in multiple countries was: 1) difficult to maintain service uptime; 2) required significant costs to operate; and 3) difficult to develop a unified set of process flows and employee experience guidelines. Delivering a consistent customer experience would prove to be even more difficult.

- **Functionality buildouts and changes were slow to roll out on legacy on-premises solutions.** Addressing the needs of the modern customer required digital features like AI-driven virtual agents and self-service portals. Developing advanced features and making them production-worthy was either too difficult or too costly to build with any consistency.

- **Legacy solutions lacked integration to cloud-based platforms that organizations were moving to.** The continued digital transformation movement by organizations resulted in bandaged solutions when integrating between legacy and new cloud-based systems. Often, these integrations were custom-coded and required additional costly infrastructure. Where the solutions were not directly integrated, the result was support agents and other business functional groups completing complex and highly manual processes across multiple platforms.

> **"We had multiple tools prior to ServiceNow, so the costs were very high. And as it was highly customized to fit our needs, it was hard to get changes in production and hard to support, and that prompted us to modernize with ServiceNow."**
>
> *Technical owner, communications service provider*

INVESTMENT OBJECTIVES

The interviewed organizations searched for a solution that could deliver on the following:

- Be an out-of-the-box solution with modern digital capabilities, such as AI-driven case resolution and intelligent task assignment.
- Be a cloud-based solution that reliably scales globally.
- Is a leader in self-service delivery.
- Minimal need for quick deployment customizations.
- Easy integration with other business functional group toolsets to serve as a single pane of glass.

After some initial RFPs and multiple proof-of-concept (POC) demonstrations, the interviewed organizations chose ServiceNow for the following reasons:

- The complexity and builds necessary for non-ServiceNow solutions meant a lengthy period before the accumulation of value. Additionally, development teams could perpetually be tied to these solutions and bring the organizations back to where they currently are.
- Ease of integration from Customer Service Management to previously existing solutions already in place presented future opportunities.
- Consistency and ease in upgrading releases is something that ServiceNow repeatedly showed. The investment would be near futureproof through newly added features. And it carries a lower risk than other multi-instance providers.

> **"Our initial intent of the [ServiceNow] tool four years ago was for support and that was it. But we've seen value really quickly and leadership teams are also seeing this and are bought-in. Our backlog of work from all over the organization is big and seeing the results here, we want to extend capabilities to all groups as we know we can bring the things to market quicker with ServiceNow."**
>
> *Senior director of CX, software org*

COMPOSITE ORGANIZATION

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

Description of composite. The composite organization is a global, $2B B2B organization that provides sales, support contracts, and physical and virtual service in the IT field. Approximately 18% of the total revenue is derived from support-related contracts. To facilitate the support operations of 750 agent FTEs, the organization previously used multiple legacy on-premises application platforms, many of which are not well integrated. Beyond front-line support agents, there are also IT engineers, field technicians, and finance personnel that are sometimes necessary to bring resolution to support cases.

Deployment characteristics. The deployment of Customer Service Management is performed in phases where it is released across the entirety of the support and service organization with tiered functionality in each phase. The initial phase involves integration activities, testing, resource mapping, and a reorganization of processes and workflows. All teams are trained after the initial deployment rollout, and they all reach effective utilization shortly before the six-month mark.

Key assumptions

- **IT organization**
- **$2B annual revenue**
- **18% of revenue from service business**
- **750 customer service agent FTEs**
- **50,600 monthly contact points**

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	Shift-left and interdepartmental efficiency gains	$1,517,760	$1,670,760	$1,835,266	$5,023,786	$4,139,437
Btr	Contact center efficiency gains	$852,480	$895,104	$939,725	$2,687,309	$2,220,766
Ctr	Revenue retention improvement	$1,530,000	$2,409,750	$2,530,238	$6,469,988	$5,283,443
Dtr	Improvement in employee turnover and training costs	$478,926	$478,926	$478,926	$1,436,778	$1,191,018
Etr	Legacy platform opex costs avoided with ServiceNow	$360,000	$360,000	$360,000	$1,080,000	$895,267
	Total benefits (risk-adjusted)	$4,739,166	$5,814,540	$6,144,154	$16,697,860	$13,729,931

Benefits Detailed By Category

INTERDEPARTMENTAL EFFICIENCY GAINS

Evidence and data. The interviewed organizations all indicated that one of the frustrations that customers despised was being bounced between agents who could do nothing to alleviate the issue they were facing, and instead they would merely pass them onto someone else. Two potential sources of this issue are: 1) the disparate platforms between different product business units and 2) an incomplete integration for free-flowing information. Customer Service Management helped in the following ways:

- Interviewees indicated that full integrations were easily made with different departments such as finance and IT where problems and situations would already be available on the Customer Service Management platform.
- The usage of the ServiceNow IT Service Management software by IT organizations increased the breadth and depth of the information shared amongst groups.
- In situations where self-service could not resolve issues, front-line customer service agents were able to find the answers without going to five different disparate systems and piecemeal the solution together. Customer Service Management served as a central pane of glass.
- The results of this are: 1) empowered customer service agents and 2) shifting left of the entire case management process where front-line employees deflect escalations to IT, finance, or field service specialists.
- Preemptive IT services were sent out on notifications to customers to avoid unnecessary support cases helping the entire workstream.
- First call resolutions (FCR) increased by as much as 20% for these situations traditionally requiring multitouch by associates.
- Information in one platform and the resulting service operations improvements broke down

silos, so that all teams had a holistic picture of customer accounts.

Modeling and assumptions. In modeling this benefit, Forrester assumes the following for the composite organization:

- Field service and IT escalations are reduced by 10% in the form of deflection.
- Efficiency for field service and IT matters are improved by a 12% efficiency rate, based on better information, intelligent routing, and intelligent guidance from Customer Service Management.
- Finance matters which traditionally are 15% of total support requests can be stemmed at the front line where information is readily available.
- Up to 14% of the finance cases are deflected because of frontline capabilities.
- If the case is passed to finance, the issues is streamlined with better information (such as outages and routed to the right person with the proper skillset) to determine the proper approach, enhancing efficiency by 10%.

Deflect interdepartmental contact points with shift-left

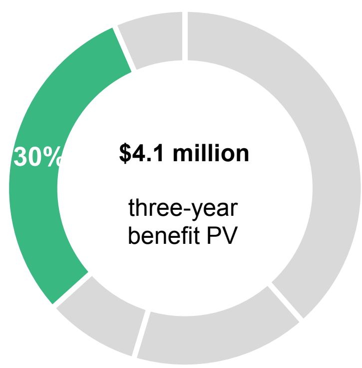
12% of truck rolls and 14% of finance calls

Risks. Forrester notes that the following matters might affect the result of this benefit category:

- Some organizations do not have field service, and they instead use a replacement of the part method via shipping. Similarly, organizations have different cost structures on handling field service at other verticals and therefore producing variability.
- Financial management might be already available to customers via other channels. This would largely eliminate the need to go through customer service first.
- Shift-left is contingent on organizations funneling requests through a single funnel, which may not be the case for all organizations.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of $4,139,437.

Interdepartmental Efficiency Gains



Shift-Left And Interdepartmental Efficiency Gains					
Ref.	**Metric**	**Calculation**	**Year 1**	**Year 2**	**Year 3**
A1	Cases escalated to require IT or a truck roll dispatch, yearly	8% of total cases	48,000	50,400	52,920
A2	Cost of escalated cases, averaged with a truck roll	$120 average	$5,760,000	$6,048,000	$6,350,400
A3	Truck rolls and escalations avoided		10%	10%	10%
A4	Truck rolls and escalation handling efficiency improvement		12%	12%	12%
A5	Average cost of a case to finance/billing		$32	$32	$32
A6	Number of contacts to finance/billing	15% of total cases	90,000	94,500	99,225
A7	Contact deflection for cases escalated to finance/billing due to self-service and integrated data		8%	11%	14%
A8	Contact efficiency for finance/billing		10%	10%	10%
At	Shift-left and interdepartmental efficiency gains	(A2*(A3+A4))+((A5*A6)*(A7+A8))	$1,785,600	$1,965,600	$2,159,136
	Risk adjustment	↓15%			
Atr	Shift-left and interdepartmental efficiency gains (risk-adjusted)		$1,517,760	$1,670,760	$1,835,266
	Three-year total: $4,869,926		**Three-year present value: $4,139,437**		

CONTACT CENTER EFFICIENCY GAINS

Evidence and data. With the move to ServiceNow Customer Service Management, organizations first saw an immediate efficiency benefit to the customer service group, i.e., shifting customers to self-service and lower cost service-handling channels. Forrester's interviews brought the following points to light:

- By enabling online web portals for self-service, knowledge bases, and low-touch cases, interviewed organizations experienced a shift from phone- and email-initiated cases to web-based ones.
- As phone-initiated cases were the most expensive, and any shift away from that format subsequently improved efficiency and decreased costs, i.e., a phone contact would sometimes cost $52 versus near zero for those cases that were self-remediated.
- The drive for the shift was largely predicated on web portals and the automation that the web portal enabled to reduce additive contact points by intelligently directing the customer.

> **"The self-service portal is much more convenient for our customers, and this is something that helps us limit the number of touch points. With the transition into ServiceNow, we transitioned 50% to 60% of our requests and then jumped past 80% in the last two years."**
>
> *Customer operations lead, software organization*

- One senior director of customer experience from a software organization stated: "The training videos available to customers on our portal help people solve problems on their own. The success can be demonstrated by the number of knowledge article views from 300 in a *year* to 600 to 700 per *month*."
- The head of the information and communications technology service desk at the communications service provider said: "After implementing e-mail parsing, we reduced 50% of the work we used to need to treat inbound mail. Reporting and logging is also there so we can go back to the information about these customers if we need to."

Contact center efficiency gains:

Reduce contact center costs by over $1M/year

Modeling and assumptions. For the composite organization, Forrester assumes:

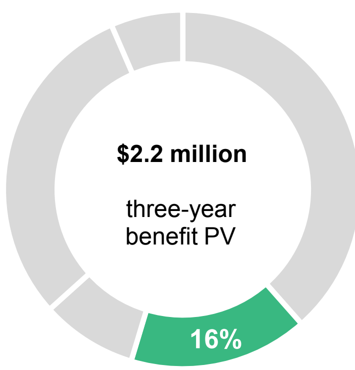
- Prior to using ServiceNow, there was a 20%/40%/40% split between support cases coming in via phone contact, web contact, and email contact, respectively.
- Through the use of automation and web portals, the composite organization makes it easy for customers to approach and solve customer service issues from a more capable web channel. Shifts move phone and email channels to the web with the two more expensive channels seeing lower usage rates by 40% and 72%, respectively.
- With a reduction in both time and the costs of fielding these service requests, the service organization is able to gain over $1M in efficiency each year, even as service requests grow with organizational growth.

Risks. There are a few factors that may affect the benefit derived in this category:

- Organizations using offshore contact centers may realize a smaller gain as the cost of labor is cheaper, but they recognize that it also may negatively affect customer experience.
- Different product lines may cause certain support cases to be more expensive than others, e.g., business internet connectivity affects the gain in this benefit.

To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $2,220,766.

Contact Center Efficiency Gains



Contact Center Efficiency Gains					
Ref.	**Metric**	**Calculation**	**Year 1**	**Year 2**	**Year 3**
B1	Phone contact prior to ServiceNow		10,000	10,500	11,025
B2	Web-based contact prior to ServiceNow		20,000	21,000	22,050
B3	Email contact prior to ServiceNow		20,000	21,000	22,050
B4	Total customer contact points per month prior to ServiceNow	B1+B2+B3	50,000	52,500	55,125
B5	Phone contact with ServiceNow	40% reduction	6,000	6,300	6,615
B6	Web contact with ServiceNow	95% increase	39,000	40,950	42,998
B7	Email contact with ServiceNow	72% reduction	5,600	5,880	6,174
B8	Total business support contacts with ServiceNow per month	B5+B6+B7	50,600	53,130	55,787
B9	Cost per phone contact		$40	$40	$40
B10	Cost per web contact		$28	$28	$28
B11	Cost per email contact		$32	$32	$32
Bt	Contact center efficiency gains	Delta between prior contact points versus now	$1,065,600	$1,118,880	$1,174,656
	Risk adjustment	↓20%			
Btr	Contact center efficiency gains (risk-adjusted)		$852,480	$895,104	$939,725
	Three-year total: $2,687,309			**Three-year present value: $2,220,766**	

REVENUE RETENTION IMPROVEMENT

Evidence and data. The result of increased customer service efficiency in meeting customers where they consume information creates a more overall positive experience for the customer. Positive customer experiences are a natural link to increased purchase behavior, as stated by prior Forrester research.[1] Some factors that help Forrester shape the composite organization are derived from the following customer statements:

- As stated by a senior director of customer experience at a software company, "As a result of not applying the proper support resources on the cases, we lost perhaps $2 [million] to $3 million dollars in revenue through customer retention per year."
- As stated by the head of information and communications technology help desk at a communications service provider: "We see a huge improvement in CES [customer effort score] since going to ServiceNow. While it is not only due to ServiceNow, it is the technology layer that allows everything to happen."
- The retention of existing customers increases by up to 1%, from existing levels of 90% to 95%.

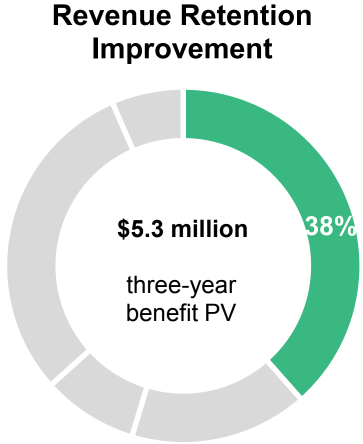
Modeling and assumptions. In modeling this benefit, Forrester assumes the following for the composite organization:

- Across three years, the retention rate increases from 0.50% to 0.75% as customer service improves.
- The improvement in customer retention is driven by faster resolution and empowering customers to find resolutions on their own. Preplanned and preemptive service and associated notifications are also a factor in helping drive up customer experience.
- Customer retention/revenue retention is precluded only to service and support contracts.

Risks. Some risk factors that can affect the benefits assessed in this benefit category are:

- The amount of service and support revenue that the composite organization assesses as a part of their total revenue stream.
- Long-term support contracts that are bought on a multiyear term may affect the amount of revenue that is in danger.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of $5,283,443.



Revenue Retention Improvement					
Ref.	**Metric**	**Calculation**	**Year 1**	**Year 2**	**Year 3**
C1	Total annual revenue		$ 2B	$ 2B	$ 2B
C2	Revenue retention affected by customer service	18% of total revenue	$360,000,000	$378,000,000	$396,900,000
C3	Percentage increase in customer retention		0.50%	0.75%	0.75%
Ct	Revenue retention improvement	C2*C3	$1,800,000	$2,835,000	$2,976,750
	Risk adjustment	↓15%			
Ctr	Revenue retention improvement (risk-adjusted)		$1,530,000	$2,409,750	$2,530,238
	Three-year total: $6,215,815		**Three-year present value: $5,283,443**		

IMPROVEMENT IN EMPLOYEE TURNOVER AND TRAINING COSTS

Evidence and data. The benefits previously discussed offer a glimpse of internal efficiency and customer efficiency. As a result of empowering agents to quickly and resolutely bring satisfaction to customers, the agents also experienced improved satisfaction.

- One interviewed organization stated that they had noted an improvement of 30 percentage points to their employee satisfaction score.
- A customer operations director from a software company stated this about his agents: “If they don’t know how to resolve something, they search in the knowledge base and get the entire process. Ultimately causing a lower turnover because of diminished frustration. Let’s add that this happens only rarely now with the intelligent assignment of agents.”
- “Our agents are definitely engaged on ServiceNow. In some cases, we are seeing our agents resolve customer issues within 24 hours, down from a week previously.”

Modeling and assumptions. Forrester has made the following assumptions to the composite model based upon findings:

- Employee satisfaction is increasing by 23 percentage points, or an improvement of 42%.
- Traditional attrition rates for FTEs in contact centers hover between 30% to 45%; the assumption used in this analysis is 35%.
- The extrapolated results indicate that the increase in employee satisfaction leads to a direct decrease in attrition rates of 14.7%.
- With incorporating the three main factors of attrition, which are recruiter costs, solicitation costs, and interviewer costs, it costs approximately $2,000 per newly hired employee — and this is without external agency costs.
- Retaining costs and ramp costs are also a factor, and they have been accounted for in this analysis.

Reduced customer service attrition

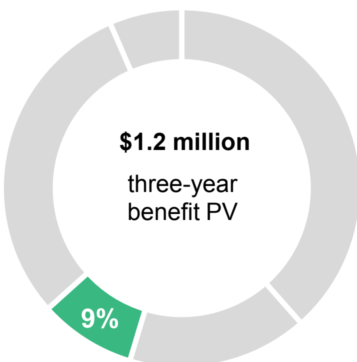
14.7 percentage points

Risks. There are a few risks to take note on this benefit bucket:

- Forrester has determined that not all customer service agents can pick up new technology at the same rate; some might take 20% to 50% longer in some instances.
- Well run organizations place their employees first, and subsequently, they may have a lower previous attrition rate.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of $1,191,018.

Improvement In Employee Turnover And Training Costs



Improvement In Employee Turnover And Training Costs					
Ref.	**Metric**	**Calculation**	**Year 1**	**Year 2**	**Year 3**
D1	Increase in employee experience percentage following ServiceNow implementation	From 55% to 78%; (78%/55%-1)	42%	42%	42%
D2	Traditional attrition rate		35%	35%	35%
D3	Decrease in attrition rate percentage points	D1*D2	14.7%	14.7%	14.7%
D4	Expected savings in training and ramp on turnover		$238,140	$238,140	$238,140
D5	Recruiting/hiring costs	Agent attrition avoided* $2,000 per hire	$294,000	$294,000	$294,000
Dt	Improvement in employee turnover and training costs	D4+D5	$532,140	$532,140	$532,140
	Risk adjustment	↓10%			
Dtr	Improvement in employee turnover and training costs (risk-adjusted)		$478,926	$478,926	$478,926
	Three-year total: $1,323,353		**Three-year present value: $1,191,018**		

LEGACY PLATFORM OPEX COSTS AVOIDED WITH SERVICENOW

Evidence and data. Forrester discovered that once ServiceNow was implemented, the interviewed organizations had retired many of the older legacy on-premises software. As many of the disparate solutions had been purchased in perpetuity, the organizations found the savings to be in the people effort to keep the platforms running.

In general, the maintenance costs were high, and outages haunted these companies, requiring IT and developer resources to identify and fix the issue.

Scaling became an afterthought due to the level of customization already built into the legacy platforms, especially when maintenance and updates took so long in the past.

Modeling and assumptions. Following data provided by customer interviews, Forrester assumes the following for the composite organization:

- The totality of homegrown solutions and various off-the-shelf platform purchases that are retired had an original cost of $2M.
- Although the maintenance, service and support, and developments costs were considered to be sunk, going forward, they were the only costs able to be avoided; at a conservative estimate of $400K annually.

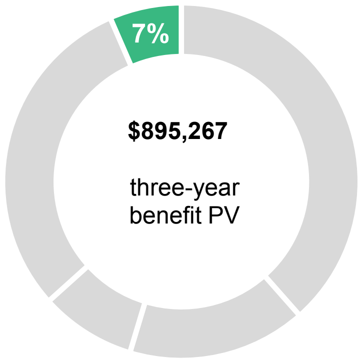
Risks. Risks that could affect the realization of this benefit include:

- The number of legacy solutions in place that can be retired. Some solutions are integrated with solutions in other business units, and hence, they cannot be retired.
- The investment in some legacy solutions served multiple purposes, such as the usage of a CRM to cover both customer service and CRM duties; this can also not be retired.

- Some larger organizations may see higher maintenance costs due to disparate and geographically distributed systems.

To account for these risks, Forrester adjusted the benefit downward by 10%, yielding a three-year, risk-adjusted total PV of $895,267

Legacy Platform Opex Costs Avoided With ServiceNow



Legacy Platform Opex Costs Avoided With ServiceNow

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
E1	Annual customer platform legacy platform cost		$2,000,000	$2,000,000	$2,000,000
E2	Legacy solution maintenance, support, and administration		20%	20%	20%
Et	Legacy platform opex costs avoided with ServiceNow	E1*E2	$400,000	$400,000	$400,000
	Risk adjustment	↓10%			
Etr	Legacy platform opex costs avoided with ServiceNow (risk-adjusted)		$360,000	$360,000	$360,000
	Three-year total: $994,741		**Three-year present value: $895,267**		

UNQUANTIFIED BENEFITS

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

- **Advanced guidance for customer service agents based on historical cases.** Interviewees stated that the guided problem-solving feature and the grouping of like issues can provide a common and previously successful plan for remediation.
  - **Guided plans of attack based on playbooks helped agents work harder, and more importantly, they delivered faster results.** The exact amount of time savings greatly varies in the complexity and frequency between organizations. For newer employees, this was a huge plus.
  - **Grouping of previous issues to identify a likely root cause and remediation path.** The idea behind *fixing an issue right the first time* is propelled by intelligent grouping of issues. This prevents additional service calls on the case, but concrete information was insufficient for Forrester to determine the exact savings.

FLEXIBILITY

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

- **Leveraging the success in customer service with the customer-obsessed model, sales professionals can sell beyond service contracts.** Sales organizations gain a holistic 360-degree view into support activity, finance activity, and finally the approval rating from the ServiceNow system, allowing them to approach the customer at the right time to sell additional products and services.

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**
Ftr	Investment costs	$1,680,000	$1,265,250	$1,328,513	$1,394,938	$5,668,701	$4,976,209
	Total costs (risk-adjusted)	$1,680,000	$1,265,250	$1,328,513	$1,394,938	$5,668,701	$4,976,209

INVESTMENT COSTS

Evidence and data. In moving forward with ServiceNow, the interviewed organizations expressed that there was a period of implementation that took several months prior to any type of rollout. The implementation period consisted of:

- Planning/mapping, integration, and testing of the solution, which ranged between two to four months if unrelated internal stoppages were removed from the timeline.
- Additional parts of this phase included process and workflow realignment, which was aided by use case templates and playbooks from ServiceNow.
- External professional services teams were typically brought in to assist in the process, amounting to between $200K to $1.7M. This cost more consistently reflects the availability of internal resources and their level of proficiency, as opposed to the organization's size.
- Training was the final piece with employees being up to speed in two to four weeks.

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

- The composite organization, along with external partners, finish the implementation phase over the course of the three months.
- Training and ramping of employees takes three weeks.
- A second phase of deployment is released shortly after, and cumulative costs for both deployments result in a total of $1.68M in the initial period.
- Costs of licensing, workflow and resource mapping, and biyearly upgrades is calculated at list pricing, resulting in an annual charge of $1.27M. The cost grows by 5% yearly to match FTE growth.

Risks.

- Interviewed organizations stated a great variance in implementation costs due to the level of integration and professional services required.

To account for this risk, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $4,976,209.

Total ServiceNow investment

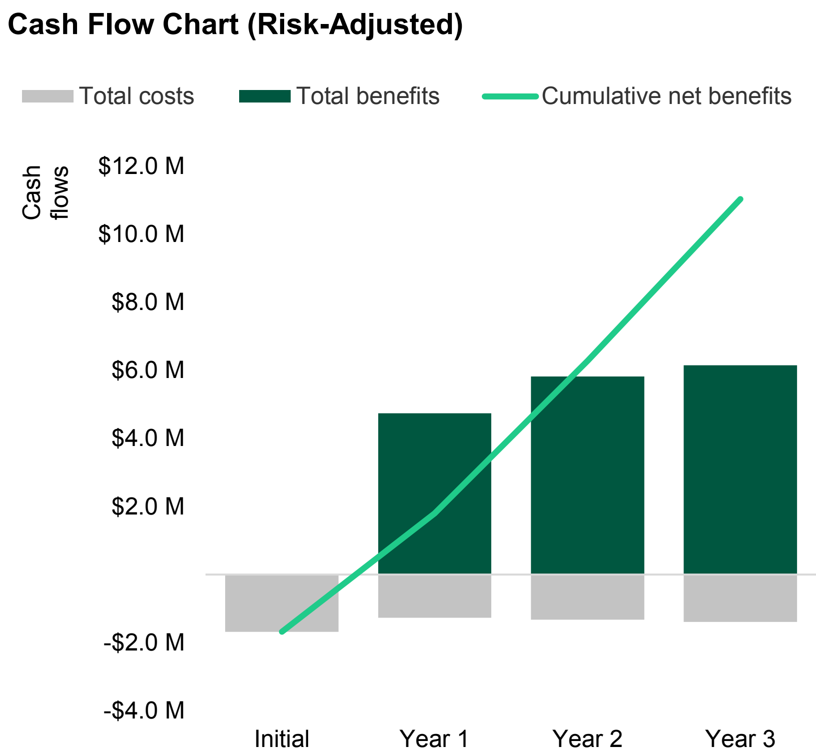
Predictable cost model based on agent count

Investment Costs

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
F1	ServiceNow investment costs			$1,125,000	$1,181,250	$1,240,313
F2	Implementation and training costs		$1,600,000	$80,000	$84,000	$88,200
Ft	Investment costs	F1+F2	$1,600,000	$1,205,000	$1,265,250	$1,328,513
	Risk adjustment	↑5%				
Ftr	Investment costs (risk-adjusted)		$1,680,000	$1,265,250	$1,328,513	$1,394,938
	Three-year total: $5,668,701			**Three-year present value: $4,976,209**		

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS



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	($1,680,000)	($1,265,250)	($1,328,513)	($1,394,938)	($5,668,701)	($4,976,209)
Total benefits	$0	$4,739,166	$5,814,540	$6,144,154	$16,697,860	$13,729,931
Net benefits	($1,680,000)	$3,473,916	$4,486,028	$4,749,216	$11,029,159	$8,753,722
ROI						176%
Payback period						<6 months

Appendix A: Total Economic Impact

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

TOTAL ECONOMIC IMPACT APPROACH

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

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

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

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

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

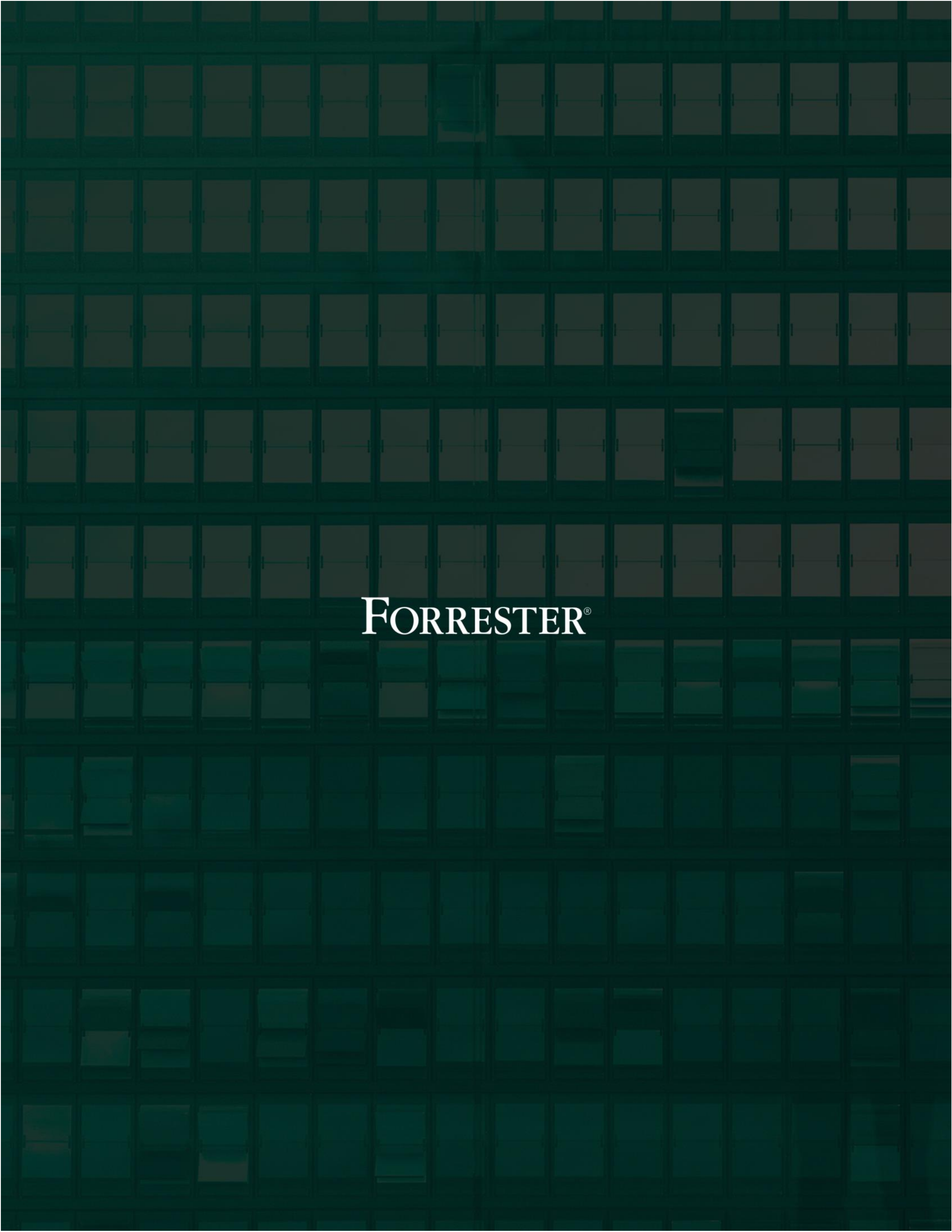
The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.

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] Source: “How Customer Experience Drives Business Growth, 2019,” Forrester Research, Inc., December 13, 2019.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