

A Forrester Total Economic Impact™
Study Commissioned By ServiceNow
June 2019

The Total Economic Impact™ Of ServiceNow IT Applications

Transform The IT Experience —
Service, Operations, And Management
Accelerate Business Value

Table Of Contents

Executive Summary	1
Key Financial Findings	1
TEI Framework And Methodology	3
The ServiceNow Customer Journey	4
Interviewed Organizations	4
Key Challenges	4
Why ServiceNow?	5
Key Results	5
Composite Organization	6
Appendix A: Financial Summary	7
Analysis Of Benefits	8
Benefit 1: IT Productivity	8
Benefit 2: Reduced Impact Of High Priority Incidents	11
Benefit 3: Employee Productivity	13
Benefit 4: Improved Project Performance And Accelerated Returns	14
Benefit 5: Reduced And Avoided Costs	15
Analysis Of Costs	17
Implementation, Subscription, And Internal Costs	17
Appendix B: Flexibility Analysis	18
Flexibility	18
Appendix C: Total Economic Impact	19
ServiceNow IT Applications: Overview	20

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Executive Summary

Key Benefits



Improved IT and employee productivity:

\$8.9 million



Improved project performance and accelerated returns:

\$4.8 million



Reduced and avoided costs:

\$6 million

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

ServiceNow provides a suite of IT management applications that enable organizations with a unified platform to manage and track digital workflows. To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed ten customers with years of experience using ServiceNow's IT applications and robust deployments across their organizations.

Before ServiceNow, the interviewed organizations were using various on-premises solutions. However, organizations reported that their previous solution was difficult to maintain, not agile or flexible enough, and promoted a subpar status quo of IT service and project performance.

The interviewed organizations decided to deploy ServiceNow IT applications due to: their cloud-first strategy; the extensible and robust nature of the platform they are housed in; and the continuous platform updates provided by ServiceNow. This resulted in significant benefits, as detailed in this case study further below. With ServiceNow IT applications, organizations have a flexible and adaptable platform that is easy to maintain and provides significant performance improvements to key areas of the business, with further opportunities to improve through the use of AI.

Forrester developed a composite organization based on data gathered from the customer interviews to reflect the total economic impact that ServiceNow's IT applications could have on an organization. The composite organization is representative of the organizations that Forrester interviewed and is used to present the aggregate financial analysis in this study. All values are reported in a risk-adjusted, three-year present value (PV) unless otherwise indicated.

Key Financial Findings

Quantified benefits. The following risk-adjusted benefits reflect the financial analysis associated with the composite organization.

- › **Improved IT productivity by \$7.5 million.** This is due to a 75% reduction in effort around report generation and resource management, a 20% improvement in IT fulfiller efficiency, a 20% reduction in service requests due to automation, a 66% reduction in effort to respond to service requests (e.g., from improved routing via machine learning), and a 50% reduction in audit support effort.
- › **Reduced impact of high priority incidents by \$3 million.** This is due to a 25% reduction in high priority incidents, a 50% reduction in time to resolve high priority incidents, and reduced downtime for employees due to critical application outages.
- › **Improved employee productivity by \$1.4 million.** This is due to the overall better service request process: automation, self service, fewer number (and faster resolution) of tickets, reduced waiting times, and improved customer satisfaction with IT.



ROI
229%



Benefits PV
\$22.7 million



NPV
\$15.8 million



Payback
7 months

- › **Improved project performance and accelerated returns by \$4.8 million.** Interviewed organizations noted that projects were now being completed on time and on budget.
- › **Reduced and avoided costs of \$6 million.** This is due to reduced effort on IT maintenance, avoided development costs, and avoided legacy solution costs.

Flexibility benefits. The interviewed organizations experienced additional qualitative and expected future benefits. These are not quantified in the financial analysis but were mentioned as significant benefits by customers.

- › **Ability to scale without increasing headcount.**
- › **Use of a single platform for many business applications.**

Costs. The following costs reflect the financial analysis associated with the composite organization.

- › **Implementation, subscription, and internal costs of \$6.9 million.** In addition to subscription costs, organizations noted further costs associated with professional implementation services, internal FTEs for implementation, internal training, and internal labor for maintenance, upgrades, new builds, and testing associated with the ServiceNow platform.

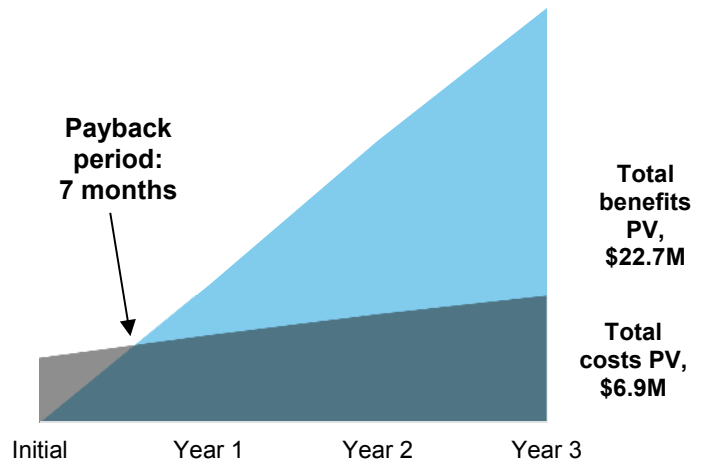
Forrester’s interviews with ten existing customers and subsequent financial analysis found that an organization similar to the interviewed organizations experienced benefits of \$22.7 million over three years versus costs of \$6.9 million, adding up to a net present value (NPV) of \$15.8 million and an ROI of 229%.

“Big picture with our ServiceNow solution: it’s about speed; it’s about the user experience, the date and quality of delivery; it’s about getting my stuff fast, and fixed faster. It’s about all the capability we can offer in terms of automation, AI, chatbots, mobile . . . all of which takes service delivery to the next level.”

IT manager, energy industry



Financial Summary



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

TEI Framework And Methodology

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

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 ServiceNow IT applications can have on an organization:



DUE DILIGENCE

Interviewed ServiceNow stakeholders and Forrester analysts to gather data relative to ServiceNow IT applications.



CUSTOMER INTERVIEWS

Interviewed 10 organizations using ServiceNow IT applications 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 ServiceNow IT applications' impact: benefits, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix C 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 ServiceNow IT applications.

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 Journey

BEFORE AND AFTER THE INVESTMENT IN SERVICENOW IT APPLICATIONS

Interviewed Organizations

For this study, Forrester conducted 10 interviews with ServiceNow customers. Interviewed customers include the following:

INDUSTRY	REGION	INTERVIEWEE	EMPLOYEES	ANNUAL REVENUE
Computer software	Global	Director of service management	20,000	\$9B
Industrial supplier	Global	Director of IT services	35,000	\$11B
Energy	Global	Director of IT strategy and planning	80,000	\$100B+
Commercial manufacturing	Global	Head of internal IT	1,500	\$350M
Conglomerate	Global	Platform architect	150,000	\$100B
Manufacturing	Global	IT manager	15,000	\$5B
Government	Asia Pacific	Director of service management	145,000	N/A
Retail	North America	Director of database technology	8,000	\$2.5B
Food retail	North America	Director of IT	260,000	\$30B
Energy	Global	IT manager	127,000	\$100B+

Key Challenges

Before the investment in ServiceNow IT applications, interviewees described the following challenges with their previous solution:

- › **Lack of agility.** Organizations noted that their previous solution was slow to deploy changes, difficult to configure, and needed significant customization to work properly. Further, the solution wasn't future-proof (i.e., it did not scale well) and nor was it flexible enough to be leveraged outside of IT and IT service management (ITSM). These limitations frustrated IT departments and left the rest of the business wanting a unified platform solution.

A director of database technology in the retail industry stated, "When you look at service management as a whole, and we considered where we wanted to go as a company, we needed a platform we could grow into instead of bolt onto."

- › **Maintenance difficulty.** Organizations noted that their previous solution was complex to maintain and required major periodic upgrades. In many cases, organizations had multiple solutions stitched together, increasing the complexity and cost of the overall system.

An IT manager in the manufacturing industry said: "Because our organization grew through acquisitions, we had 10 different systems in use across the company. It was time to rationalize."

"Before ServiceNow, we needed to develop workarounds to meet our customers' expectations for speed; point solutions for particular business needs. Then we'd have to manage more of that cost, application sprawl, etc., it just grew over time."

*Director of service management,
computer software industry*



- › **Significant room for improvement in IT service and project performance status quo.** A director of IT strategy and planning in the energy industry told Forrester: “We needed to build a business case to move off of our previous solutions. It’s about reducing the number of calls to our service desk. It’s about quicker evolution time. It’s about automating processes so that you don’t need humans to carry out simple tasks. These are all reasons we needed a better solution.”

Why ServiceNow?

Interviewed organizations stated the following reasons on why they chose ServiceNow IT applications to address their challenges:

- › **Cloud-first strategy.** A director of service management in the computer software industry said: “ServiceNow was built natively in the cloud; the speed of our business is growing, we needed a cloud-native platform with broad adoption and an agile delivery model. The alternative hosted solutions weren’t able to compete.”
- › **Extensible platform.** A director of IT strategy and planning stated: “What sold it for us was the wider platform capability; the ServiceNow platform is highly extensible. It operates like a genuine mobile platform where we can build whatever we want on it. It’s the qualitative promise there in terms of wider integration, automation, and simplification. We built a business case, but those factors we didn’t quantify are what sold us on ServiceNow.”
- › **Robust nature that is continuously updated.** A platform architect for a conglomerate told Forrester: “The other cloud systems we looked at were too lightweight. We needed a real enterprise solution that would not only replace our ITSM system, but have more capabilities around the ServiceNow configuration management database (CMDB), a good service catalogue and user request portal, automation, etc. ServiceNow is very robust in all of those things. Additionally, we saw growth and investment in the platform, and that really excited us as well.”

Key Results

The interviews revealed that the investment in ServiceNow IT applications addressed the challenges that interviewees were facing and provided additional benefits as well:

- › **Flexible and adaptable platform.** A director of database technology in the retail industry said: “We’ve seen a significant improvement in speed and time-to-value. We’re able to deploy new features and functionality at a much faster rate due to ServiceNow’s open platform, compared to other providers that may be more locked down. It’s a great combination of the flexibility and stability we need.”
- › **Easier maintenance.** A director of database technology in the retail industry stated: “There are a multitude of benefits on the technology side: less care and feeding, no infrastructure to worry about. If you look at the suite of products we own, there’s no way I could find a solution to fill every one of those needs and have it be as well built as what I’ve got in one ServiceNow agreement. That scale helps.”

“Our primary driver for ServiceNow was moving toward supporting a larger IT ecosystem. However, the surrounding benefits, due to the transparency and new technology capability, is something we wouldn’t have had with our legacy solutions. **ServiceNow is foundational for where we need to take the next level of operations management.**”

IT manager, energy industry



“Almost every release, ServiceNow comes out with a new feature or technology that we were ready to develop on our own. I’m effectively eliminating \$200,000 a year that I would have paid for new software.”

Director of service management, computer software industry



“We’ve significantly improved average remediation time. Our baseline was 10 days — with ServiceNow, that’s down to three days.”

IT manager, manufacturing industry



“Our first-call resolution holy grail is 60% to 70%. With ServiceNow we’re at 90%.”

Director of service management, government



- › **Improved performance.** Organizations noted several significant benefits as a result of implementing the ServiceNow platform, including: improved IT, employee, and process efficiencies; improved end user satisfaction; incident deflection and reduction of request tickets due to the self-service portal, knowledge base, and ability to automate; fewer outages; reduced audit support required; improved visibility and performance of projects; and reduced effort around resource management.

Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. The composite organization is representative of the 10 companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews has the following characteristics:

Description of composite. The composite organization is a global conglomerate with 17,500 employees and \$5 billion in annual revenue. Having come from an on-premises solution, they decided to deploy ServiceNow IT Service Management (ITSM), IT Operations Management (ITOM), IT Business Management (ITBM), IT Asset Management (ITAM), Benchmarks, and Performance Analytics, and are interested in deploying Virtual Agent and machine learning in the future.

The composite organization used professional services from ServiceNow for implementation, which included Service Mapping, ITAM, and Orchestration. They deployed 400 fulfiller licenses, 300 ITBM licenses, and 6,000 ITOM nodes.

“Our CSAT score for customers using our portal has improved every year since we implemented ServiceNow — we started at 60% and now we’re at 85%.”

*Director of service management,
computer software industry*



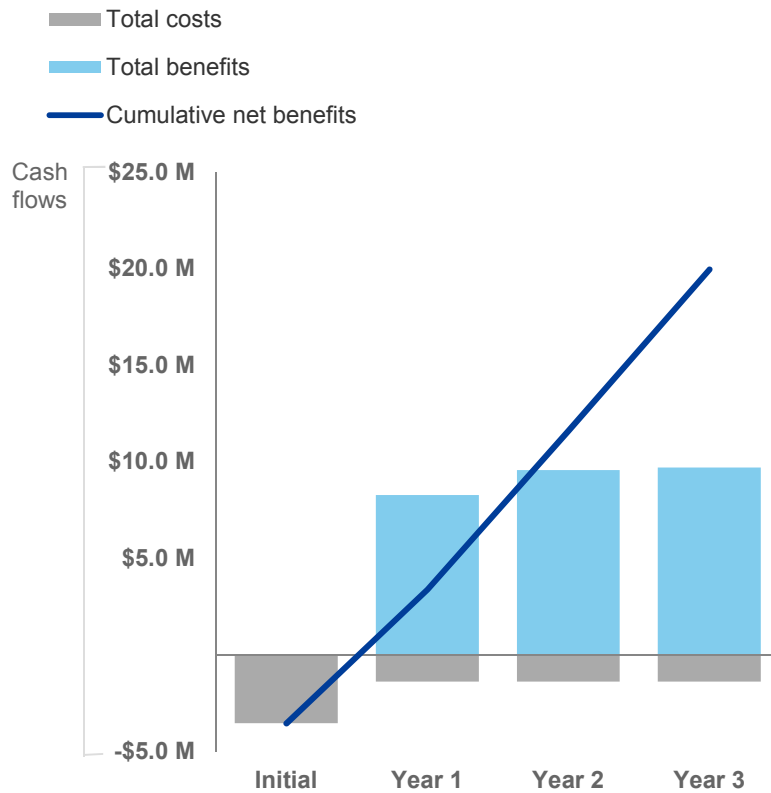
Key assumptions

- 17,500 employees
- \$5 billion annual revenue
- ITSM, ITOM, ITBM, ITAM, Performance Analytics, Benchmarks
- 400 ITSM fulfillers, 300 ITBM licenses, and 6,000 ITOM nodes

Appendix A: 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)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	(\$3,524,224)	(\$1,362,333)	(\$1,362,333)	(\$1,362,333)	(\$7,611,224)	(\$6,912,145)
Total benefits	\$0	\$8,279,627	\$9,579,740	\$9,714,740	\$27,574,108	\$22,742,903
Net benefits	(\$3,524,224)	\$6,917,294	\$8,217,407	\$8,352,407	\$19,962,884	\$15,830,758
ROI						229%
Payback period						7 months

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	IT productivity	\$2,859,840	\$3,136,320	\$3,136,320	\$9,132,480	\$7,548,218
Btr	Reduced impact of high priority incidents	\$1,189,455	\$1,189,455	\$1,189,455	\$3,568,364	\$2,957,998
Ctr	Employee productivity	\$348,633	\$697,266	\$697,266	\$1,743,164	\$1,417,057
Dtr	Improved project performance and accelerated returns	\$1,822,500	\$1,957,500	\$2,092,500	\$5,872,500	\$4,846,713
Etr	Reduced and avoided costs	\$2,059,200	\$2,599,200	\$2,599,200	\$7,257,600	\$5,972,917
	Total benefits (risk-adjusted)	\$8,279,627	\$9,579,740	\$9,714,740	\$27,574,108	\$22,742,903

Benefit 1: IT Productivity

Interviewed organizations described the following benefits related to IT productivity:

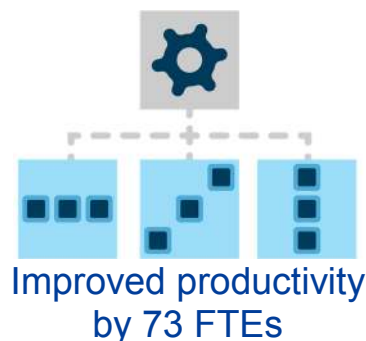
- › Reduced service requests and incidents due to automation and self service with knowledge base (e.g., password resets, mailbox, procurement, employee profile updates, etc.).
- › Reduced effort to resolve service requests and incidents.
- › Reduced effort around report generation.
- › Reduced effort around resource management.
- › Improved meeting efficiency.
- › Reduced audit support effort.

These benefits can be achieved through a variety of ServiceNow applications and services, including: ITSM, ITOM, ITBM, ITAM, Performance Analytics, continuous upgrades, Virtual Agents, and machine learning for routing and deflecting service requests.

With the savings in IT productivity, IT employees are able to reallocate effort to higher value tasks, which gives the composite organization flexibility to scale without adding IT headcount. Based on the customer interviews, Forrester estimates for the composite organization:

- › Automated resolution of 20% of the most common service requests and incidents. Automation is partially deployed in Year 1 and ramps up in Year 2 and Year 3 from 5% to 20% in the overall reduction of tickets.

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to have a PV of \$22.7 million.



- › Prior to ServiceNow, service requests and incidents were touched an average of three times. With ServiceNow, requests are routed immediately to the proper resolution group, reducing the amount of work spent by 66%. Eighty percent of requests can benefit from the improved routing, and 60% of the improvement can be attributed to ServiceNow — the remaining improvements are attributed to improved Information Technology Infrastructure Library (ITIL) processes overall.
- › A 75% reduction in effort for a team of eight FTEs responsible for report generation and resource management.
- › 45% of fulfillers' work can benefit from the use of the ServiceNow platform (e.g., excluding meetings, career development, and administrative activities), the centralized nature of the ServiceNow solution enables team members to be 20% more efficient.
- › A 50% reduction in the effort associated with audits for the IT team.
- › An average fully burdened IT support annual salary of \$96,000.
- › A 50% capture rate on time saved is put toward productive tasks.

This benefit can vary due to uncertainty related to:

- › Total reduced effort of IT tasks.
- › Impact of automation.
- › Effort surrounding audit support tasks.
- › Average fully burdened annual salary. Note that salary is a conservative estimate of the value an employee provides to the organization.
- › Productivity capture rate.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding an annual benefit ranging from \$2.9 million to \$3.1 million, with a three-year, risk-adjusted total PV of \$7.5 million.

"I have 1.5 FTEs on audit support right now. Without ServiceNow and the rigor of that platform, I would need two or three extra people."

Director of IT services, industrial supplier



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

Benefit 1: IT Productivity Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
A1	Effort for report generation and resource management, before ServiceNow (FTEs)	Composite organization	8	8	8
A2	Reduction in effort for report generation and resource management, with ServiceNow	Composite organization	75%	75%	75%
A3	Subtotal: improved productivity (FTEs)	$A1 \times A2$	6	6	6
A4	Number of ServiceNow fulfillers	Composite organization	400	400	400
A5	Percentage of fulfiller workload that can benefit from ServiceNow	Composite organization	45%	45%	45%
A6	Efficiency gains for work of fulfillers	Composite organization	20%	20%	20%
A7	Subtotal: improved productivity (FTEs)	$A4 \times A5 \times A6$	36	36	36
A8	Total service requests and incidents before ServiceNow per year	Composite organization	262,500	262,500	262,500
A9	Percentage of service requests avoided with automation	Composite organization	5%	20%	20%
A10	Average time to resolve tickets (hours)	Composite organization	0.5	0.5	0.5
A11	Subtotal: improved productivity (FTEs)	$A8 \times A9 \times A10 / 2,080$ (rounded)	3.2	12.6	12.6
A12	Percentage of service requests and incidents that can be resolved more easily due to streamlined process, data, and resolution system	Composite organization	80%	80%	80%
A13	Percentage reduction in effort with ServiceNow	Composite organization	66%	66%	66%
A14	Percentage attributed to ServiceNow beyond the ITIL process rigor	Composite organization	60%	60%	60%
A15	Subtotal: improved productivity (FTEs)	$A8 \times (1 - A9) \times A12 \times A13 \times A14 \times A10 / 2,080$ (rounded)	19	16	16
A16	Number of FTEs supporting audits, before ServiceNow	Composite organization	4	4	4
A17	Reduced effort associated with audits with ServiceNow	Composite organization	50%	50%	50%
A18	Subtotal: improved productivity (FTEs)	$A16 \times A17$	2	2	2
A19	Average fully burdened fulfiller (IT support) salary	Composite organization	\$96,000	\$96,000	\$96,000
A20	Productivity capture	Composite organization	50%	50%	50%
At	IT productivity	$(A3 + A7 + A11 + A15 + A18) \times A19 \times A20$	\$3,177,600	\$3,484,800	\$3,484,800
	Risk adjustment	↓10%			
Atr	IT productivity (risk-adjusted)		\$2,859,840	\$3,136,320	\$3,136,320

Benefit 2: Reduced Impact Of High Priority Incidents

Interviewed organizations described the following benefits related to reduced impact of high priority incidents:

- › Reduced number of high priority incidents.
- › Reduced time to resolve high priority incidents.
- › Reduced downtime for employees (early identification of issues and improved resolution capability resulted in fewer outages).

These benefits can be achieved through a variety of ServiceNow applications and services, including: ITSM, ITOM, Performance Analytics, and machine learning.

Based on the customer interviews, Forrester estimates for the composite organization:

- › High priority incidents are 1% of the total incidents and requests.
- › Total number of high priority incidents are reduced by 25% with ServiceNow.
- › Total time to resolve high priority incidents is reduced by 50%.
- › With ServiceNow, an average of five incidents are avoided per year that would otherwise result in a critical application outage of at least 1 hour, representing a 25% reduction.
- › The average fully burdened IT engineer annual salary is \$130,000.
- › The organizational impact of 1 hour of lost productivity for end users is \$182,292, estimated by calculating the hourly salary of the number of employees working at a given point during the 24-hour global workday.

This benefit can vary due to uncertainty related to:

- › The nature and quantity of high priority incidents and outages.
- › Average fully burdened annual salary. Note that salary is a conservative estimate of the value an employee provides to the organization.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding an annual benefit of \$1.2 million and a three-year, risk-adjusted total PV of \$3 million.



Reduced high priority incidents by 25%

“We’ve improved our ability to respond to major incidents. We’ve got a much more effective CMDB in ServiceNow, which means we have a better situational awareness of our environment.”

Director of IT strategy and planning, energy industry



Benefit 2: Reduced Impact Of High Priority Incidents Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	High priority incidents (P0, P1) before ServiceNow	A8*1%	2,625	2,625	2,625
B2	Reduction of high priority incidents with ServiceNow	Composite organization	25%	25%	25%
B3	Number of hours to resolve high priority incidents before ServiceNow	Composite organization	4	4	4
B4	Number of hours to resolve high priority incidents with ServiceNow	Composite organization	2	2	2
B5	Subtotal: number of hours to respond to high priority incidents before ServiceNow	B1*B3	10,500	10,500	10,500
B6	Subtotal: number of hours to respond to high priority incidents with ServiceNow	B1*(1-B2)*B4	3,937.5	3,937.5	3,937.5
B7	Average fully burdened IT engineer salary	Composite organization	\$130,000	\$130,000	\$130,000
B8	With ServiceNow, number of avoided incidents resulting in at least 1 hour of critical application outage enterprisewide	Composite organization	5	5	5
B9	Impact of 1 hour of lost productivity for end users	C1/3*C3/2,080 (rounded)	\$182,292	\$182,292	\$182,292
B10	Subtotal: total end user impact of critical application downtime	B8*B9	\$911,460	\$911,460	\$911,460
Bt	Reduced impact of high priority incidents	(B5-B6) *B7/2,080+B10	\$1,321,616	\$1,321,616	\$1,321,616
	Risk adjustment	↓10%			
Btr	Reduced impact of high priority incidents (risk-adjusted)		\$1,189,455	\$1,189,455	\$1,189,455

Benefit 3: Employee Productivity

Interviewed organizations noted that employee productivity improved due to overall better service request processes, including:

- › Automation.
- › Self service.
- › Fewer number (and faster resolution) of service tickets.
- › Reduced waiting times.
- › Improved customer satisfaction with IT.

These benefits can be achieved through a variety of ServiceNow applications and services, including: ITSM, ITOM, Performance Analytics, Benchmarks (which contributes to identifying areas for automation, fewer tickets, faster resolution times, etc.), continuous upgrades, Virtual Agents, and machine learning.

With savings in employee productivity, employees are now able to reallocate effort to higher value tasks, which gives the composite organization flexibility to scale without adding headcount. Based on the customer interviews, Forrester estimates for the composite organization:

- › An estimated 3 hours per employee are saved per year, which ramps up from 1.5 hours in Year 1 of deployment to 3 hours in Years 2 and 3. This results in over 25,000 hours saved per year throughout the organization.
- › The average fully burdened annual salary for employees is \$65,000.
- › A 50% capture rate on time saved is put toward productive tasks.

This benefit can vary due to uncertainty related to:

- › Time saved for employees.
- › Productivity capture.
- › Average fully burdened annual salary. Note that salary is a conservative estimate of the value an employee provides to the organization.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding an annual benefit ranging from \$348,633 to \$697,266, with a three-year, risk-adjusted total PV of \$1.4 million.



Over 25,000 hours saved per year

“Our CSAT score for customers using our portal has improved every year since we implemented ServiceNow — we started at 60% and now we’re at 85%.”

Director of service management, computer software industry



This analysis shows that the customers interviewed for this study experienced significant financial benefits, particularly around improvements in IT productivity and cost savings. The IT organizations drove higher service levels for their customers through maturing their ITIL processes, automating common IT request processes, and eliminating service outages. They emphasized how ServiceNow provided a better end user service experience to their employees and enabled employee productivity across the organization through an easy-to-navigate self-service portal, knowledge management, and integrated mobility. This prompted an increase in customer survey results by as much as 6%, as well as a change in the perception of IT from task doer to business partner.

Benefit 3: Employee Productivity Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
C1	Number of employees	Composite organization	17,500	17,500	17,500
C2	Average time saved per employee due to improved service request process and resolution per year (hours)	Composite organization	1.5	3.0	3.0
C3	Average fully burdened employee salary	Composite organization	\$65,000	\$65,000	\$65,000
C4	Productivity captured	Forrester assumption	50%	50%	50%
Ct	Employee productivity	$C1 * C2 / 2,080 * C3 * C4$	\$410,156	\$820,313	\$820,313
	Risk adjustment	↓15%			
Ctr	Employee productivity (risk-adjusted)		\$348,633	\$697,266	\$697,266

Benefit 4: Improved Project Performance And Accelerated Returns

Interviewed organizations noted that projects were now being completed on time and on budget. A director of service management told Forrester: “We don’t miss deadlines anymore; I can’t remember the last time we missed a day. Before, it wasn’t unusual for projects to essentially go to twice the original budget, we don’t have that issue anymore.”

These benefits can be achieved through a variety of ServiceNow applications and services, including: ITBM, ITOM, Performance Analytics, and ITSM (change management and CAB Workbench).

Based on the customer interviews, Forrester estimates the following for the composite organization:

- › An average of 50 projects are completed per year with an initial budget of \$150,000 per project.
- › ServiceNow improves project budget performance by 25%.
- › Project schedule performance improves by 20%.
- › The internal rate of return for projects is 10%. With project schedule performance improving by 20%, this accelerates the rate of return for 20% of projects. Note that this benefit compounds year over year.

This benefit can vary due to uncertainty related to:

- › The annual budget for projects.
- › Improved budget and schedule performance.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding an annual benefit ranging from \$1.8 million to \$2.1 million, with a three-year, risk-adjusted total PV of \$4.8 million.



20% improvement in project schedule performance

“We don’t miss deadlines anymore; I can’t remember the last time we missed a day. Before, it wasn’t unusual for projects to essentially go to twice the original budget, we don’t have that issue anymore.”

Director of service management, government



Benefit 4: Improved Project Performance And Accelerated Returns Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
D1	Number of projects	Composite organization	50	50	50
D2	Average amount initially budgeted per project	Composite organization	\$150,000	\$150,000	\$150,000
D3	Average % overbudget for projects before ServiceNow	Composite organization	25%	25%	25%
D4	Subtotal: improved budget performance with ServiceNow	$D1 \times D2 \times D3$	\$1,875,000	\$1,875,000	\$1,875,000
D5	Annual project spend, with ServiceNow	$D1 \times D2$	\$7,500,000	\$7,500,000	\$7,500,000
D6	Improved project schedule performance	Composite organization	20%	20%	20%
D7	Internal rate of return for projects	Composite organization	10%	10%	10%
D9	Subtotal: accelerated returns due to improved project completion times	$D5 \times D6 \times D7 +$ (previous year)	\$150,000	\$300,000	\$450,000
Dt	Improved project performance and accelerated returns	$D4 + D9$	\$2,025,000	\$2,175,000	\$2,325,000
	Risk adjustment	↓10%			
Dtr	Improved project performance and accelerated returns (risk-adjusted)		\$1,822,500	\$1,957,500	\$2,092,500

Benefit 5: Reduced And Avoided Costs

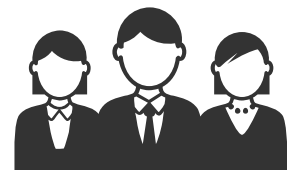
Interviewed organizations described the following benefits related to reduced and avoided costs:

- › Reduced effort on IT maintenance.
- › Avoided development costs, as each ServiceNow upgrade contains features and functions customers would have developed internally or outsourced.
- › Avoided legacy solution annual costs, in terms of consolidated licenses and annualized infrastructure costs, along with an avoided major upgrade of the legacy solution.

These benefits can be achieved through a variety of ServiceNow applications and services, including: ITSM, ITOM, ITBM, ITAM, Performance Analytics, and continuous upgrades.

Based on the customer interviews, Forrester estimates for the composite organization:

- › Reduced IT maintenance effort by three FTEs.
- › Average fully burdened IT support annual salary of \$96,000.
- › Avoided development costs of \$200,000 per year.
- › Avoided legacy solution costs of \$2.4 million, with only \$800,000 recognized in Year 1 due to ongoing and overlapping legacy system licenses.
- › Avoided on-premises legacy solution upgrade cost of \$1 million in Year 1.



Reduced IT maintenance by three FTEs

“Almost every release, ServiceNow comes out with a new feature or technology that we were ready to develop on our own. I’m effectively eliminating \$200,000 a year that I would have paid for new software.”

Director of service management, computer software industry



This benefit can vary due to uncertainty related to:

- › Reduction in maintenance effort and avoided development costs.
- › Avoided legacy system costs.
- › Average fully burdened annual salary. Note that salary is a conservative estimate of the value an employee provides to the organization.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding an annual benefit ranging from \$2.1 million to \$2.6 million, with a three-year, risk-adjusted total PV of \$6 million.

Benefit 5: Reduced And Avoided Costs Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
E1	Reduced effort for IT maintenance (FTEs, reallocated to higher value tasks)	Composite organization	3.0	3.0	3.0
E2	Average fully burdened fulfiller (IT support) salary	A8	\$96,000	\$96,000	\$96,000
E3	Avoided development costs	Composite organization	\$200,000	\$200,000	\$200,000
E4	Avoided legacy solution annual costs	Composite organization	\$800,000	\$2,400,000	\$2,400,000
E5	Avoided legacy solution upgrade	Composite organization	\$1,000,000	\$0	\$0
Et	Reduced and avoided costs	$(E1 \cdot E2) + E3 + E4 + E5$	\$2,288,000	\$2,888,000	\$2,888,000
	Risk adjustment	↓10%			
Etr	Reduced and avoided costs (risk-adjusted)		\$2,059,200	\$2,599,200	\$2,599,200

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	Implementation, subscription, and internal costs	\$3,524,224	\$1,362,333	\$1,362,333	\$1,362,333	\$7,611,224	\$6,912,145
Total costs (risk-adjusted)		\$3,524,224	\$1,362,333	\$1,362,333	\$1,362,333	\$7,611,224	\$6,912,145

Implementation, Subscription, And Internal Costs

Interviewed organizations described the implementation, subscription, and internal costs association with their ServiceNow solution.

For implementation, organizations noted the following costs:

- › Professional services costs to ServiceNow.
- › Internal FTEs for implementation.
- › Fulfiller and ITBM worker training.
- › Employee training on the use of the ServiceNow service request system.

There was also a nominal amount of internal labor required for the ServiceNow solution for maintenance, upgrades, new builds, and testing.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total costs to have a PV of \$6.9 million.

Appendix B: Flexibility Analysis

Flexibility

The value of flexibility is clearly unique to each customer, and the measure of its value varies from organization to organization. There are multiple scenarios in which a customer might choose to implement ServiceNow IT applications and later realize additional uses and business opportunities, including:

- › **Ability to scale without increasing headcount.** Interviewed customers have been able to redirect IT headcount onto more strategic tasks. For mature organizations, this allowed them to continuously improve the strategic and operations business value that IT brought to the organization. For organizations experiencing high growth, this allowed them to scale quickly without directly increasing headcount.
- › **Use of a single platform for many business applications.** A platform architect for a conglomerate stated: “A lot of soft value comes in having a consolidated platform. There’s value in having all your server information in the same tool that your systems or application support is happening in, and even having your HR service portal on the same platform as your IT service portal — the support infrastructure is all the same, and you can have the same people supporting all these systems.”

A director of IT in the food retail industry told Forrester: “We’re in the digital transformation stage right now, and that means a lot to our CIO. That means automation, better or more robust AI, better user experience, mobility, flexibility. ServiceNow enables all those things to come together to provide a solid, stable product that our end users are empowered with in their business practices.”

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

“We haven’t increased headcount in years; yet, we were still able to expand the overall organization, and roll out a new operating system across the organization. This would not have been possible without ServiceNow.

Additionally, we’ve been able to significantly improve the service we’re providing end users without increasing headcount in our call center. Without ServiceNow, we would have had to increase call center headcount by 50% to attain the same first-call resolution rates and reduced wait times.”

*Director of service management,
government*



Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for a future additional investment. This provides an organization with the “right” or the ability to engage in future initiatives but not the obligation to do so.

Appendix C: 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.

ServiceNow IT Applications: Overview

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

IT Service Management

Accelerate digital transformation and propel business growth while delivering outstanding employee experiences with the leading cloud-based platform for intelligent IT service management. Get unparalleled IT productivity and raise the bar for service experience excellence with intelligent automation, machine learning, and virtual agents. Get more from your investment with actionable insights on every process.

- Elevate the service experience — automate support for common requests with virtual agents, so you can provide consistently great service and allow your staff to work on more meaningful tasks.
- Improve IT productivity — use machine learning to automate routine tasks and increase employee and agent productivity.
- Achieve new insights — get full visibility with built-in dashboards and analytics providing real-time, actionable information to continually improve services.
- Consolidate IT services — use built-in best practices to rapidly consolidate your inefficient tools to a single system of action in the cloud.

Virtual Agent

Solve high volume and common requests quickly to reduce cost, increase customer satisfaction, and keep agents focused on more pressing issues with preconfigured, automated chatbots. Empower customers, partners, and employees with consistent, scalable, and always-on self-service interactions to get instant information and kick off workflows across the enterprise.

- Improve service by providing customers and employees instant answers through 24/7 automated support.
- Reduce agent workload by resolving common requests so your employees can spend more time on complex inquiries.
- Scale business efficiency by lowering costs and handling higher volumes of routine tasks.

Predictive Intelligence

Resolve issues faster using machine learning to intelligently categorize, route, prioritize, and assign issues with recommendations based on patterns and context.

- Automatically categorize tasks using the power of machine learning and your historical data.
- Decrease resolution times and errors through accurate classification and assignment predictions.
- Increase agent productivity by saving time spent manually identifying major incidents and issues.

Continual Improvement Management

Drive new levels of service efficiency by automatically initiating and tracking service improvements across the enterprise. Take continual improvement from theory to reality with a structured framework that brings together people, processes, and data in one place to achieve service excellence in any process.

IT Business Management

Deliver business outcomes with speed and agility and drive strategic portfolio planning and execution. Align work to business priorities, identify areas to optimize operations, and reduce time-to-market.

- Align work to priorities — centralize all project, app, and cost data to make smarter decisions and align with the business. Deliver more of what matters by continuously planning and optimizing resources.
- Optimize your app spend — rationalize your apps with operational data on a single platform. Quickly identify apps to retire or migrate to cloud and track through to project delivery.
- Reduce time-to-market — manage all your work in one place and reduce bottlenecks to get to market faster. Respond with agility by reallocating resources as priorities shift.

IT Operations Management

Deliver intelligent, always-on business services when you manage them using AIOps from ServiceNow. Gain visibility into your entire operations footprint across on-premises and cloud, maximize service uptime and optimize service delivery cost and governance. Expect a better operations experience driven by intuitive workflows and service-level intelligence.

- AIOps for your business services — service-level intelligence applied to discover and map services, maximize service uptime and optimize cost and governance.
- Fastest route from events to alerts to incidents to resolution — service-level intelligence applied across the entire events to resolution consumption process. Leverage machine learning, real-time analytics, historical data and service context to drastically reduce mean time to resolution (MTTR).
- The intelligent operations experience — an overall better operations experience driven by intuitive workflows and service-level intelligence.

IT Asset Management

Take control of your IT assets and improve efficiency with increased visibility into the full IT asset life cycle. Optimize costs and automate intuitive IT workflows across your organization.

- Asset Management — reduce costs while improving IT efficiency. Track life cycle costs, utilization, and contracts for hardware and virtual assets.
- Software Asset Management — do more with your software license data. Reduce spend, mitigate risk, and drive action across IT with intelligent operations. Surface the software cost of an IT change, rationalize apps with life cycle intel, and optimize your software spend with perpetually clean CMDB data.

Performance Analytics

Drive digital transformation with real-time insight into business performance to proactively optimize services, improve processes, and align with organizational goals. Provide stakeholders with trusted, in-platform data and secure, simple access to KPIs to make smarter decisions that result in better service quality and increased efficiency.

- Anticipate trends — monitor existing conditions and prior performance to adjust service performance.
- Prioritize resources — detect service bottlenecks as they occur and identify areas for improvement.
- Deliver automation and self-service — easily identify areas where automation and self service can increase efficiency and reduce costs.
- Drive toward continual service improvement — pinpoint areas for performance improvement and take action using key indicators, mobile-enabled scorecards, time charts, analytics, drilldowns, and dashboards.
- Align service with overall business goals — support company strategy with deep insight into business operations and balance user satisfaction with operating costs.