

A Forrester Total Economic Impact™  
Study Commissioned By ServiceNow  
November 2018

# The Total Economic Impact™ Of Staying Current With ServiceNow Upgrades

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## ABOUT FORRESTER CONSULTING

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## Key Benefits Of Consistent Upgrades (Three-Year, PV)



Faster and easier to upgrade and maintain ServiceNow:  
**\$2.6 million**



Reduced time to build out new functionality:  
**\$2.8 million**



Increased productivity from faster release of new functionality:  
**\$2.4 million**

## Executive Summary

ServiceNow delivers regular upgrades to its solutions that provide innovative new features, greater stability, and increased performance for customers. ServiceNow commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential benefits of staying up to date with ServiceNow upgrades.

Forrester interviewed several customers with years of experience using ServiceNow that have adopted a consistent upgrade approach, and compared their current results against existing states when these organizations had not upgraded consistently. By consistently performing upgrades to the ServiceNow platform, customer organizations can expect:

### › **Faster and easier upgrades:**

Improve upgrade speed and efficiency while lowering operating costs, reaping a value of **\$2.6M** over three-years, in present value (PV). Increase end user productivity from earlier utilization of functionality improvements.

### › **Reduced time to build out new functionality:**

Decrease and avoid effort necessary to build out new functionality and enhancements, saving organizations potentially **\$2.8M** over three-years, PV. Reduce reliance on developers to build out new and enhanced functionality.

### › **Increased productivity from faster release of new functionality:**

Increase end user productivity from more quickly delivered ServiceNow functionality, bringing efficiencies of **\$2.4M** over three years, PV.

A solutions engineer at a healthcare company stated, “Our absolute biggest driver to staying consistent with our upgrades was how we missed new capabilities because of how long it previously took for us to upgrade.”

Prior to adopting the best practice of staying consistent with upgrades — as many leaders in the software-as-a-service (SaaS) vendor field often recommend or force — customers took longer to unlock the full potential of the ServiceNow solutions they used — all while tying up the availability of developers and IT resources to produce enhancements that were already in the ServiceNow release road map. Organizations using ServiceNow should realize that:

- › The ServiceNow platform offers organizations generous room to customize and build out functionality with its development platform to work in an optimized fashion with internal processes; this is a vital part of how organizations adapt to changing business needs. This value proposition is integral to what ServiceNow provides.
- › Strategic planning of enhancements while keeping in mind what might already be in development from ServiceNow can minimize costs while meeting business goals.

Forrester uncovered through interviews that some customers, however, had previously deviated or customized beyond suggested best practices of particular solution sets, preventing them from upgrading consistently to leverage twice-yearly releases from ServiceNow. One business leader explained: “We needed a faster route to new features. We needed to get better and faster at upgrading because, otherwise, we’d have to expend significant resources to build out the functionality ourselves.”

## Financial Results (Three-year, PV)



**Decrease in  
time-to-  
upgrade:  
6 months**



**Upgrade vs.  
build delta:  
4 months**



**Annual  
benefits  
\$2.6 million**



**Benefits PV  
\$7.8 million**

Customers of ServiceNow should pay particular attention to the accelerated pace of innovation made possible by consistently upgrading with ServiceNow releases — enabling users to do more sooner and more efficiently than otherwise would be possible on internal buildout efforts. While ServiceNow does not force upgrades, organizations can easily unlock key benefits with little internal expenditure of resources if staying true to the suggested upgrade path from ServiceNow.

## Key Findings

**Quantified findings.** The following risk-adjusted present value (PV) quantified benefits are representative of those experienced by the companies interviewed in the following section over three years. Costs were not calculated, as upgrading and updating are typically a standard practice for software solutions, especially for software-as-a-service (SaaS) solutions. Additionally, the degree of effort to return to an upgradeable state varied significantly between interviewed organizations. As costs are not a part of this analysis, Forrester has not included an ROI calculation. Readers should evaluate their situation and deviation from suggested customization guidelines and assess cost and benefits from that point of reference.

- › **Faster and easier to upgrade and maintain ServiceNow:** Adhering to customization best practices significantly lowered the effort to upgrade and support ServiceNow instances.
  - Upgrade faster with less effort.
  - Once upgraded, reduce ServiceNow-related IT support.

Prior to staying close to suggested best practices, interviewed organizations had involved themselves in sporadic upgrades to their ServiceNow family of products. The primary inhibitor from making the move was a level of customization that took the platform far enough from the base configurations of the platform that upgrading required reengineering of the dependent components. By customizing with best practices in mind, organizations reduced the time necessary to conduct successful upgrades into a production environment from seven months to a single month.

Once upgrading consistently, many of the organizations gained faster remediation of issues from internal IT groups as well as from ServiceNow, with up to 80% of ServiceNow incidents being avoided.

Over three years and six major upgrade cycles of the ServiceNow family of solutions, a typical company would see a benefit **PV of \$2.6 million or \$877,521 on average per year.**

- › **Reduced time to build out new functionality:** The developer operations (DevOps) team avoided buildout costs for new or enhanced capabilities. Some organizations chose to upgrade their ServiceNow line of solutions to enhance or expand upon capabilities provided by the base version of the solutions. Other organizations built out these capabilities internally, which was at times redundant to the enhancements rolled out by ServiceNow in release upgrades. Across three years, the savings to wait for the releases and accompanied enhancements would result in a **PV of \$2.8 million or annual average of \$929,645.**
- › **Increased productivity from faster release of new functionality:** ServiceNow users often saw value sooner with new and enhanced functionality by upgrading rather than building internally.



“A key factor to our success with ServiceNow is staying current with the platform. . . . We’ve achieved tremendous value because of new features with the releases and having visibility of the product road map two releases out.”

*Product owner, global conglomerate*



“Since sticking to the consistent upgrade path, we spend the majority of our time building and creating new things in our business rather than duplicating what ServiceNow gives us.”

*Digital innovations manager, technology manufacturer*

- Waiting for road-mapped ServiceNow functionality usually puts tools in the hands of end users sooner than internal buildouts.
- Planned ServiceNow releases are accompanied by best practices and quick-start processes.

Organizations can expect an acceleration of productivity due to faster release of capabilities than if those capabilities were built internally. For smaller organizations without the budget to innovate, the value proposition that ServiceNow offers with upgrades would be completely unachievable otherwise. The buy-versus-build scenario becomes simpler with consistent upgrades as ServiceNow regularly releases capabilities twice a year that meet most organizational needs.

As a part of new functionality and enhancements released by ServiceNow, quick-start templates and new industry best practices are also released, making for efficient user transitional stages and minimal change impact. New process builds were largely reduced as compared to internally built-out enhancements. Forrester expects **an annualized value of \$785,865, or a three-year PV of \$2.4 million.**

**Flexibility benefits.** The following risk-adjusted flexibility benefit is representative of the benefit experienced by an interviewed company. However, it has been excluded from overall TEI results delivered, as the usage can be highly dependent on the organization and the margin rate, vertical industry, and competitive environment in which it serves.

- › **The ServiceNow tool, Automated Test Framework (ATF), can further streamline a faster path to upgrading.** The Automated Test Framework from ServiceNow can increase speed to upgrade the entire suite of solutions by as much as 30% for the entire upgrade process. The whole spectrum of ServiceNow products can utilize ATF — with value increasing as enterprises adopt more ServiceNow product families.

**Unquantified benefits.** The interviewed organizations experienced the following benefits, which are not quantified for this study:

- › Integrations and data connections between ServiceNow solution sets and other enterprise services retain their tightly knit connections when staying consistent with ServiceNow upgrades. When ServiceNow customers build out past the recommended level of customization, integrations and data exchange become hindered — resulting in breakages in linked data and decreased productivity enterprisewide.
- › **Benefits of new functionality and enhancements improve external consumers’ user experiences.** Enhancements and new capabilities brought by ServiceNow upgrades provide an incremental improvement to the service provided to consumers — both internal and external. Due to the highly variable value assigned to customers and their level of interaction with the interviewed organizations, we have chosen to omit this as a quantified value, although it stands as an important benefit on its own.
- › **Customization planning and execution are simpler when staying up-to-date with ServiceNow upgrades.** ServiceNow upgrades are continually updated to meet the needs of modern enterprises, large and small. The best practices for customization on newer feature enhancements that accompany these upgrades become clearer for organizations — enabling customizations that are better suited for long-term strategic goals.

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 consistent upgrades.

The objective of the framework is to identify the benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that ServiceNow consistent upgrades can have on an organization:



### **DUE DILIGENCE**

Interviewed ServiceNow stakeholders and Forrester analysts to gather data relative to Consistent Upgrades.



### **CUSTOMER INTERVIEWS**

Interviewed four organizations using Consistent Upgrades to obtain data with respect to 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 Consistent Upgrades impact: benefits, 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 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 ServiceNow Consistent Upgrades.

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 Consistent Upgrades Customer Journey

## BEFORE AND AFTER THE CONSISTENT UPGRADES APPROACH

### Interviewed Organizations

For this study, Forrester conducted four interviews with ServiceNow customers that had adopted a consistent upgrade approach. Interviewed customers include the following:

INDUSTRY	NUMBER OF SERVICENOW USERS	INTERVIEWEES	SERVICENOW SOLUTIONS DEPLOYED
Healthcare provider	100K+ internal and external users	Service management office manager, Sr. solutions engineer	ITSM, ITOM, ITBM, GRC, Development platform
Global conglomerate	100K+ internal users	Product owner of ServiceNow	ITSM, ITOM, CSM, ITBM, HRSM
Healthcare provider	30K internal users	ITSM team lead, ITSM applications manager	ITSM, ITOM, HRSM
Technology manufacturer	7K internal users	Digital innovations manager	ITSM, ITBM, Performance Analytics

### Key Challenges

Forrester heard consistently from interviewed organizations that while the ServiceNow family of solutions led to greater productivity in their environment, many business units wanted to develop customizations that they believed would further improve business-level outputs. Issues arose, however, with a “build-now” approach. The following are some themes that surfaced:

- › **The build-now approach required organizations of additional developer resources.** Driven by the rationale to deliver on business unit desires, many organizations chose to build internally using scarce developer resources. In addition, process owners and ServiceNow fulfillers were pulled in to drive the development, testing, and validation of buildout efforts. Internal costs increased, and the efforts for larger projects generally took the greater portion of a year to deliver.
- › **High levels of customizations and buildouts slowed the process of upgrading, often forcing organizations to skip new releases.** While progression was slow, some of the capability buildouts were successful to a degree in meeting business-level needs. The buildouts, however, often deviated far enough from the recommended practices that these organizations could not upgrade with ease. The effort required to analyze and execute the necessary adjustments to upgrade took on average seven months, and even longer for those organizations that had no centralized ServiceNow-dedicated team.
- › **Falling behind on upgrades caused organizations to fall out of support from ServiceNow.** ServiceNow generally distributes major releases of its family of solutions twice a year. Organizations that wanted to upgrade could not keep up with the release cadence as their dedicated teams were too encumbered developing, testing, and fixing their own customizations — causing the organizations to fall behind on releases and ultimately out of support from ServiceNow.

“Our absolute biggest driver to staying consistent with our upgrades was how we missed new capabilities because of how long it previously took for us to upgrade. By the time we deployed a release, the platform would have a new release with new capabilities.”

*Christopher Whitesell, senior solutions engineer, Fairview Health*



› **End users suffered due to buggy and unstable customizations.**

The lack of consistent upgrades hampered organizational users. As development teams built more customizations, the functionality generated new issues with bugs and instability. The opportunity cost of not upgrading also translated to end users not being able to leverage performance and stability improvements backed by ServiceNow.

## Key Results

The interviews revealed that key results from committing to consistent upgrades include the following:

- › Staying closer to the recommended general SaaS- and ServiceNow-suggested levels of customization produces long-run savings and value generation. Upgrading used to be a disruptive process to the DevOps and ServiceNow teams within the organizations. By maintaining better governance on customizations and upgrading at a faster pace, the organizations now save on development effort costs, improve end user efficiency and satisfaction, and decrease help desk and process owner task loads while delivering advanced feature sets included in the ServiceNow releases. One interviewee explained, “We now prioritize upgrades over building features because the desired features are typically already on the ServiceNow road map.”

Developers now focus on incremental improvements to their ServiceNow solutions and projects elsewhere in the business with newly freed time. Rather than developing and reworking major customizations, the development teams can more broadly focus on other value-add projects across the enterprise. One interviewee stated, “We now focus on enhancements rather than wrenching to just keep the lights on.”

- › **Engagement with ServiceNow on processes and workflows accelerates functionality rollouts.** Rather than twisting new technology to fit antiquated in-house processes, ServiceNow and its community guides enable organizations to leverage quick-start workflows to more efficiently leverage new capabilities. The product owner at a global conglomerate explained: “You can think you’re doing best practice with your own process, but you’re not adapting to what ServiceNow provides — which is a solution that comes with mature best practices around it. That’s part of the reason why we’ve been so successful with the upgrades.”

## Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated value analysis that illustrates the areas financially affected. The composite organization is representative of the four 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 is defined as the following:

“We waited for a ServiceNow release and actually got our portal up three months early, because it integrated right out of the box while saving us months on development effort.”

*Product owner, global conglomerate*



“The maturity level of processes and workflows in the ServiceNow platform in most cases exceeded those of our organization. Rather than bending the tool to our possibly broken or misconceived processes, we’ve been highly successful in trusting processes that ServiceNow has provided.”

*Darin Rippentrop, service office manager, Fairview Health*





- › **The composite organization.** This global multibillion dollar business is a B2B organization that leverages a number of ServiceNow solutions and has an internal workforce of over 17,500 users utilizing the platform. This organization also has a dedicated team for the ServiceNow line of solutions, comprising developers in various capacities, which we categorize as DevOps. A small portion of fulfillers and power users are categorized as testers for upgrades and capability buildouts.
- › **Deployment characteristics.** The composite organization has been using ServiceNow for several years and has shifted from the philosophy of build now to a consistent upgrade approach. The organization wanted to improve its delivery model for enhanced capabilities and to deliver on and support user experiences that had previously been declining. This case study demonstrates benefits across a three-year span assuming the organization stays close to ServiceNow's suggested best practices.



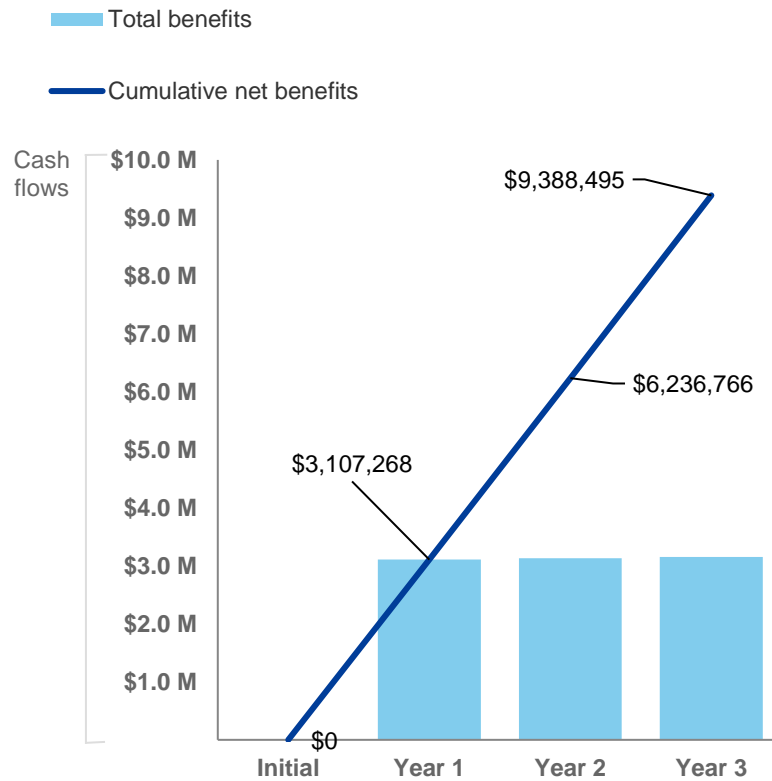
### Key assumptions

- 17,500+ internal ServiceNow users
- 700+ fulfillers
- 7 DevOps FTEs managing ServiceNow solution set
- Uses 4 ServiceNow solution sets

# Appendix A: Financial Analysis – Consistent Upgrades

## CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

### Cash Flow Chart (Risk-Adjusted)



The financial results calculated in the Benefits sections can be used in conjunction with your specific costs 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 net benefit values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit section.

### Cash Flow Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total benefits	\$0	\$3,107,268	\$3,129,498	\$3,151,729	\$9,388,495	\$7,779,091

## Quantified Benefit Data As Applied To The Composite

### Total Benefits

Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
<b>BENEFIT GROUP 1: FASTER AND EASIER TO UPGRADE AND MAINTAIN SERVICE NOW</b>						
Atr	Reduction in cost to upgrade by adhering to best practices, exclusive of new buildouts	\$964,466	\$976,354	\$988,243	\$2,929,064	\$2,426,173
Btr	Avoidance of IT support costs	\$82,992	\$82,992	\$82,992	\$248,976	\$206,389
<b>BENEFIT GROUP 2: REDUCED TIME TO BUILD OUT NEW FUNCTIONALITY</b>						
Ctr	Avoided capability buildout costs by DevOps	\$1,121,472	\$1,121,472	\$1,121,472	\$3,364,416	\$2,788,935
<b>BENEFIT GROUP 3: INCREASE PRODUCTIVITY FROM FASTER RELEASE OF NEW FUNCTIONALITY</b>						
Dtr	Acceleration of new and enhanced capabilities value realization	\$731,496	\$731,496	\$731,496	\$2,194,488	\$1,819,122
Etr	Simplification of workflow and process development	\$206,842	\$217,184	\$227,526	\$651,551	\$538,472
<b>Total benefits (risk-adjusted)</b>		<b>\$3,107,268</b>	<b>\$3,129,498</b>	<b>\$3,151,729</b>	<b>\$9,388,495</b>	<b>\$7,779,091</b>

### Benefit A: Reduction In Cost To Upgrade By Following ServiceNow Customization Best Practices

By staying within the parameters of suggested scope of customization, the composite organization immediately realized a significant decrease in the effort required to perform upgrades. Time required of the internal groups to analyze, code, and test upgrades dropped from seven months to a single month. The organization largely eliminated the analysis and coding phases from the entire upgrade process, leaving mainly just testing on separate instances to validate the upgrades. In the larger organizations that were interviewed with more complex services, upgrading took as many as nine months of effort previously.

Principle drivers that enabled this benefit include:

- › Out-of-the-box integration between ServiceNow family of solutions.
- › Elimination of the need to recode multiple heavily customized capabilities that held interdependencies.

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 be a PV of nearly \$7.8 million.

- › Regular patch updates that reduce bugs and increase performance.

For the composite organization, Forrester assumes:

- › A team of seven DevOps and 30-plus ServiceNow fulfillers previously led the charge on upgrades.
- › To address the major ServiceNow releases prior to staying close to customization best practices, the DevOps team would have needed to expend 30 weeks while fulfillers required four weeks.
- › In switching to an out-of-the-box variant of the overall ServiceNow platform and bringing the services back to from a highly customized model, effort was reduced by 86% overall.
- › The minimum cost to upgrade was over \$1.2 million per year to address the two major annual ServiceNow releases.
- › A reduction delta of over \$1 million to perform the upgrades was realized.
- › Effort required across the team members shrunk by nearly 18,000 hours in the first year alone.

Moving forward while adhering to this model, this team of DevOps and fulfillers realized increased savings as the systems progressively grew in capabilities. To stay conservative, this model does not increase developers year-over-year as they are generally a scarce and limited resource. Additionally, this benefit category has been risk-adjusted for potential benefit impact. Due to the possibility of less complex customizations that organizations may have had previously, we've downward-adjusted this benefit by 10%, resulting in a three-year risk-adjusted PV of \$2,426,173.



Staying close to suggested methods of customization shortens the ServiceNow upgrade process, generally from seven months to a single month.

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.

## Reduction In Cost To Upgrade By Following Customization Best Practices, Exclusive Of New Buildouts: Calculation Table

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
A1	DevOps team dedicated to ServiceNow FTE count		7	7	7
A2	Average yearly pay — DevOps team dedicated for ServiceNow, fully loaded	\$120,000*1.2x benefits multiplier	\$144,000	\$144,000	\$144,000
A3	Fulfiller team used to test upgrades, in FTEs, scaled to full year to imply taking 100% testing responsibilities	5% of fulfillers at 15% usage	5	6	7
A4	Fulfiller average hourly salary, fully loaded	\$80,000*1.2x benefits multiplier	\$96,000	\$96,000	\$96,000
A5	ServiceNow upgrade frequency		2	2	2
A6	Time to upgrade, per SN dedicated DevOps — if out of baseline, as a percentage of a year	30 weeks	0.58	0.58	0.58
A7	Time to test, per fulfiller testing upgrades — if out of baseline in weeks, as a percentage of a year	4 weeks each upgrade	0.08	0.08	0.08
A8	Minimum cost to upgrade — if out of baseline	$(A1*A2*A5*A6)+(A3*A4*A5*A7)$	\$1,246,080	\$1,261,440	\$1,276,800
A9	Total effort reduction across groups of developers and testers		86%	86%	86%
A10	Delta in hours given back to DevOps and testers for feature addition or enhancement, yearly		17,840	18,160	18,480
A11	Cost to upgrade, per year, staying close to baseline	$A8*(1-A9)$	\$174,451	\$176,602	\$178,752
A12	Delta in cost of upgrading from adhering to best practices versus without	$A8-A11$	\$1,071,629	\$1,084,838	\$1,098,048
At	Reduction in cost to upgrade by following customization best practices, exclusive of new buildouts	A12	\$1,071,629	\$1,084,838	\$1,098,048
	Risk adjustment	↓10%			
Atr	Reduction in cost to upgrade by following customization best practices, exclusive of new buildouts (risk-adjusted)		\$964,466	\$976,354	\$988,243

## Benefit B: Avoidance Of IT Support Costs

In releasing deployments that are closer to suggested customization practices, organizations reduced IT support. One interviewee went as far to say, “We’ve nearly eliminated our entire ServiceNow help desk.” Another interviewee asserted: “ServiceNow support tickets used to take two weeks to resolve on our customized pieces. We now have these resolved within 24 hours.”

- › We found that due to the minimalization of customizations, internal ServiceNow help desk tickets were easier to address due to extensive documentation provided by ServiceNow. Additionally, support teams from ServiceNow could better diagnose issues as there was little deviance from standard platform releases.

For the composite organization, Forrester assumes:

- › Upwards of 80% of ServiceNow-related help desk tickets were deflected due to fewer bugs and performance issues in newer official releases of the platform.
- › Additional time savings was realized on support calls that were not deflected and required help from ServiceNow. This savings was not factored into this benefit category as the majority of the work savings went to ServiceNow technicians.
- › Cumulatively, over three years, IT support staff reclaimed a PV of \$206,389. The benefit of this category was risk-adjusted down by 5% to account for organizations that may have a less complex scenario with shorter help desk calls.



The need for IT support on ServiceNow products is heavily reduced due to simplification of ticket resolution.

**Avoidance Of IT Support Costs: Calculation Table**

Ref.	Metric	Calculation	Year 1	Year 1	Year 1
B1	IT support tickets/year		5,200	5,200	5,200
B2	Reduction in tickets	80%	80%	80%	80%
B3	Average ticket time (min)		30	30	30
B4	Time saved per year (min)	$B1 \times B2 \times B3$	124,800	124,800	124,800
B5	Time saved per year (hour)	$B4 / 60$ minutes	2,080	2,080	2,080
B6	IT support salary (yearly)	$\$70K \times 1.2 \times$ benefits modifier	\$84,000	\$84,000	\$84,000
B7	IT support salary (hourly)	$B6 / 2,000$ hours	\$42	\$42	\$42
Bt	Avoidance of IT support costs	$B5 \times B7$	\$87,360	\$87,360	\$87,360
	Risk adjustment	↓5%			
Btr	Avoidance of IT support costs (risk-adjusted)		\$82,992	\$82,992	\$82,992



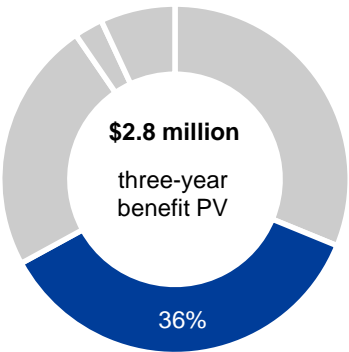
## Benefit C: Avoided Capability Buildout Costs By DevOps

Upgrading with the ServiceNow release cycle has the benefit of acquiring new capabilities or enhancements to capabilities for the platform. All interviewed organizations cited the desire to acquire the latest tools as their primary rationale for upgrading. Often in these organizations' existing states, the buildout process of capabilities was lengthy and required the same DevOps and testing team involved with upgrades. Internal resources were limited, causing the organizations to choose either to buildout or to upgrade. In the cases where additional resources could be pulled, many of the capability buildouts would surface later as features that ServiceNow delivered with upgrades. According to one interviewee: "Our own efforts to build out capabilities proved extremely difficult. Once we saw ServiceNow's road map, we halted our own efforts and saved months of development effort."

For the composite organization, Forrester assumes that:

- › Development efforts on new major capability buildouts required nearly 26% more effort than upgrading in a scenario with highly custom buildouts.
- › Major development engagements occurred once a year and took teams nearly nine months to complete, due to resource constraints.
- › ServiceNow feature enhancements and additions could address 70% or greater of the business needs from the platform.

By eliminating the need to engage in major development efforts on the ServiceNow family of solutions, the composite organization kept up with every major release of the platform and performed smaller enhancements that improved end user productivity while maintaining upgradability. This benefit category results in gains of over \$1.1 million annually and \$2,788,935 PV over three years.



Avoidance of new  
capability buildout costs:  
**36% of total benefits**

Avoided Capability Buildout Costs By DevOps: Calculation Table

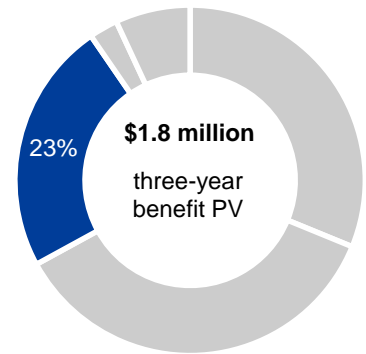
Ref.	Metric	Calculation	Year 1	Year 2	Year 3
C1	Capabilities and enhancement buildout cost, inclusive of DevOps and testers		\$1,602,103	\$1,602,103	\$1,602,103
C2	Addressability of SN features and enhancements to organizational needs, as a percent		70%	70%	70%
Ct	Avoided capability buildout costs by DevOps	C1*C2	\$1,121,472	\$1,121,472	\$1,121,472
	Risk adjustment	0%			
Ctr	Avoided capability buildout costs by DevOps (risk-adjusted)		\$1,121,472	\$1,121,472	\$1,121,472

## Benefit D: End User Productivity Uplift Due To Accelerated Release Of New And Enhanced Functionality

Producing highly customized segments of the ServiceNow platform is difficult, as the ServiceNow platform reaches end users across nearly the entire enterprise. To cater to various different business units — HR or IT, for instance — developers and architects need to carefully think about the various requirements of each of these groups along with these groups' end users. While many organizations practice the “design once, build once” principle, success is highly variable. The interviewed organizations suggested that this was an issue that readily occurred in their customization journeys in the past, causing development phases to expand scope and prolong capability deployments.

Forrester analyst Liz Herbert points out: “The one-version nature of SaaS has made it easier for organizations to use tools effectively. For example, industry versions can be seamlessly deployed with minimal rework because everyone deploys the same version and has minimal ability to change the underlying code.”<sup>1</sup> While ServiceNow fundamentally allows some degree of customization, Forrester believes that customization while heeding suggested best practices accelerates the pace at which end users can obtain value from improved and net-new functionality.

- › When accounting for the factors of rework alongside the initial duration of builds, the composite organization could release and deploy new capabilities four months sooner by following the consistent upgrade path.
- › Forrester's prior interviews and survey with ServiceNow customers suggest a benefit value of over \$17 million annually for the four core solutions of the ServiceNow family, consisting of IT Service and Operations Management, HR Service Delivery, Customer Service Management, and IT Business Management. Customers in this study revealed that each of the major upgrades provide their organizations with effective gains between 5% and 10%. Assimilating this together as shown in the table below, these gains are worth \$812,773 per year prior to risk adjustments.
  - We recognize that some organizations may not realize full value of one or more of their ServiceNow solutions. User traction and maturity of the organization's change management are also concerns. As a result, we have downward risk-adjusted the value of this benefit to a three-year PV of \$1,819,122.



Capability enhancements and additions from ServiceNow upgrades arrive sooner than internal builds



The time-to-value acceleration of improvements result in over \$1.8M PV across the enterprise.

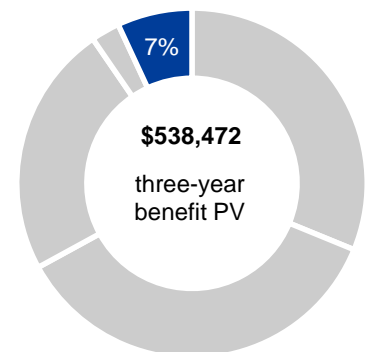
## End User Productivity Uplift Due To Accelerated Release Of New And Enhanced Functionality: Calculation Table

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
D1	Number of core ServiceNow solutions in use		4	4	4
D2	Efficiency and productivity realized across the enterprise from ServiceNow solutions deployed as a total solution set, annualized		\$17,416,571	\$17,416,571	\$17,416,571
D3	Effective gain in productivity and efficiencies due to enhancements and functionality buildouts		7%	7%	7%
D4	ServiceNow upgrades across family of solutions per year		2	2	2
D5	New and enhanced capability rollout acceleration, existing state vs. consistent upgrades, in months per upgrade		4	4	4
Dt	End user productivity uplift due to accelerated release of new and enhanced functionality	$D2 \times D3 \times D4 \times D5 / 12$	\$812,773	\$812,773	\$812,773
	Risk adjustment	↓10%			
Dtr	End user productivity uplift due to accelerated release of new and enhanced functionality (risk-adjusted)		\$731,496	\$731,496	\$731,496

## Benefit E: Simplification Of Workflow And Process Development

Organizations leveraging best practices and pre-templated workflows from ServiceNow can reduce effort on processes management, development, and testing if built from less heavily modified versions of the platform — saving time for process owners and end users alike. Bending workflows to fit within the existing archetypes necessitated reengineering and additional change management with each new release of software. One customer called this “reinventing the wheel over and over again.” Often, the existing processes were built around legacy technology — without new technology and future capability road maps in mind, creating significantly more effort to develop workflows that worked smoothly. Examples include Sarbanes-Oxley (SOX) processes for GRC, as well as incident management, where improvements like self-service portals are introduced.

A more prescribed approach to the rollout of ServiceNow and the associated best practices often reduce work for business units to formulate and deliver process changes. As incremental process changes are enacted with each upgrade of ServiceNow, prepopulated templates along with best practices and self-help guides become available to fast-track the uptake of changes.



Simplification of workflow and process development: **7%** of total benefits

Under the previous state of not performing consistent upgrades, process owners needed to develop, reengineer, and test processes upon the release of new internal buildouts that lacked foresight in preparation of future upgrades. Support of these rollouts was ambiguous as well, leading to end user confusion and recalibration of workflows by process owners.

Quantitatively, the composite organization experienced the following:

- › Process owners, process testers, and power users collectively spent an average of 28 hours per process.
- › Using the templates, self-help, and community help provided by ServiceNow, this process engineering and adoption was reduced by 20%.
- › End users have been left out of this calculation as we expect “beta” type problems to be sorted by power users and process testers.

One customer explained that the time reduction for process owners and testers was reduced by as much as 30%. In total, this benefit category not only enhances the time-to-value of using new features but also reduces labor costs by \$566,813.

Forrester realizes that not all organizations are capable of leveraging the pre-templated and designed workflows that ServiceNow proposes. However, given the coverage that we have seen of ServiceNow across multiple verticals among interviewed customers, we believe the risk that comes with using ServiceNow’s workflow and process suggestions are low, resulting in a slight downward adjustment of this benefit category by 5% to a risk-adjusted benefit figure of \$538,472 PV over three years.

#### Simplification Of Workflow And Process Development: Calculation Table

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
E1	Process owners and power users involved in process buildouts		180	189	198
E2	Effort necessary for process buildout, validation, and recalibration, per process owner in hours/year	4 processes developed or redesigned per year per process owner	112	112	112
E3	Reduction in time to align processes using suggested templates and frameworks		20%	20%	20%
E4	Hours saved by using quick-start best practices and templates	$E1 * E2 * E3$	4,032.0	4,233.6	4,435.2
E5	Cost per hour of process owners and power users		\$54	\$54	\$54
Et	Simplification of workflow and process development	$E4 * E5$	\$217,728	\$228,614	\$239,501
	Risk adjustment	↓5%			
Etr	Simplification of workflow and process development (risk-adjusted)		\$206,842	\$217,184	\$227,526

# 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 consistent upgrades and later realize additional uses and business opportunities, including:

- › **Further acceleration of upgrades with the Automated Testing Framework (ATF).** Building on the theme of a customizable platform, yet possessing the ability to address upgradeability, the ServiceNow ATF tool enables organizations to test customizations and upgrade with a repeatable cadence. Benefits spread across multiple segments of the business, including those that have already been covered, and remove surprises that may affect the underpinnings of the entire suite of ServiceNow solutions.
- › Our analysis of the effects suggests an acceleration of upgrades and internal customizations by as much as 30% to admins, testers, and developers of ServiceNow — even for those organizations that stay close to the suggested boundaries of customizations. For organizations that have defined clear needs to build rather than wait or buy, the ATF tool will decrease the effort for new builds and rework of such builds so that associated ServiceNow upgrades and functionality can continue to be added.

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

## Unquantified Benefits

Forrester's interviews and analysis of ServiceNow customers pointed to additional benefits that could not be reasonably quantified but are still important to note.

Some customers indicated the use of the ServiceNow platform for external-facing users. In general, we noticed an improvement on the following factors:

- › Performance improved with each release, leading to incremental improvement in the user experience and customer satisfaction.
- › Errors relating to bugs diminished and led to greater customer satisfaction.
- › Functionality improvements granted external end users with features that led to automation and decreased internal labor needs.

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.



Staying on the path of consistent upgrades becomes even easier with the Automated Testing Framework.

# ServiceNow Consistent Upgrades: Overview

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



## ServiceNow makes work, work better for people.

ServiceNow makes work better across the enterprise. Getting simple stuff done at work can be easy, and getting complex multi-step tasks completed can be painless. Our applications automate, predict, digitize and optimize business processes and tasks, across IT, customer service, security operations and HR service delivery, creating a better experience for your employees and customers while transforming your enterprise.

### Modernize IT service management

Get to value fast, simplify the IT experience, and make smarter decisions.

IT is leading the charge toward digital transformation, but complex legacy tools act as barriers along the way. With ServiceNow, your new service desk is up and running fast with built-in proven practices. An easy-to-use service portal makes submitting requests and delivering services painless. You'll work smarter with Agent Intelligence to automatically categorize and assign tasks and gain control with complete IT service visibility – no infrastructure required.

### Eliminate service outages

Identify current and future service issues, pinpoint disruptions, and automate remediation.

Business service outages negatively impact customers, partners, and employees—resulting in financial losses and damage to company reputation. Eliminate outages with a service aware approach, ingesting operational information, enabling IT to predict and prevent issues, and quickly respond to incidents.

### Digitize your business with intelligent apps

Automate processes, modernize experiences and connect your enterprise.

Traditional application development and delivery can't meet the requirements of today's fast moving digital businesses. ServiceNow provides a comprehensive platform - the Now Platform - empowering citizen to professional developers, and an application store so that everyone can quickly build or deliver Intelligent Apps to accelerate your digital transformation.

### Run IT like a business

Gain complete portfolio and financial visibility, align better with the business, and accelerate service delivery.

Centralize all business and operational demand. Get full visibility on planned and unplanned work. Prioritize applications, projects, and demand all within the context of what matters to the business. Manage and coordinate development and project activities to ensure technology is delivered faster.

### Resolve security incidents and vulnerabilities fast

Prioritize and resolve threats based on business impact.



Bring incident and vulnerability data from your security tools into a structured response engine that uses intelligent workflows, automation, and a deep connection with IT to prioritize and resolve threats quickly based on the impact they pose to your organization.

## Consumerize the employee service experience

Increase HR efficiency while making it easy for employees to get service across the enterprise. Today's workforce expects consumer grade service experiences. With ServiceNow, you can make it easy for employees to be employees by providing fast, personalized, and ever-improving levels of service, even for processes like onboarding that span beyond HR. Employee productivity and satisfaction will rise, and so will HR's reputation.

## Increase customer satisfaction by solving issues faster

Deliver an effortless customer experience, connect teams to fix issues, and proactively prevent calls. Digitally transform customer service by connecting departments, workflows, and systems to proactively resolve customer issues. Provide a personalized experience for customers while automating and reducing case volume for agents.

## Inspire Executive Advisory Program

The ServiceNow Inspire™ program works with leaders ready for significant business transformation. We help Global 2000 CXOs reimagine their service management strategy and roadmap—from first insight to final implementation. Our team of industry strategists, former customers, architects, and designers have improved corporate results, brand, and valuation for some of the world's largest companies.

# 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.

## Appendix D: Endnotes

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<sup>1</sup> Source: “From Land-And-Expand To Having A Plan: SaaS Implementation Practices For 2018,” Forrester Research, Inc., August 9, 2018.