# **FORRESTER**<sup>®</sup>

# The Total Economic Impact™ Of ServiceNow Field Service Management

Cost Savings And Business Benefits Enabled By Field Service Management

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Consulting Team: Margaret Firth Matthew Dunham



#### ABOUT FORRESTER CONSULTING

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# **Executive Summary**

ServiceNow Field Service Management uses modern features and a single platform to optimize field service delivery throughout the entire end-to-end service management lifecycle. Increased visibility and control empower customers to improve key measures of performance, deflect field service visits, and promote cost savings and growth within the field service business.

With <u>ServiceNow Field Service Management</u> (FSM), companies from a wide range of industries, including retail, telecommunications, transportation, the public sector, and others can optimize field service across the full end-to-end equipment lifecycle. ServiceNow FSM supports a variety of use cases, such as installation, break-fix, servicing, building maintenance, warranty support, and other functions.

ServiceNow FSM can be deployed at scale to B2B and B2C organizations of a variety of sizes, ranging from smaller teams to those with more than 20,000 field workers. With a robust integration strategy and a diverse array of modules and features, ServiceNow FSM improves the visibility of key elements of effective field service, including parts, labor, and equipment. ServiceNow FSM also allows different stakeholders and teams to track projects in real time on a single platform, which fosters collaboration between departments. Streamlining field service reduces costs while delivering efficiency that is key to preserving and growing existing revenue streams.

Forrester Research identifies field service as playing a key role in delivering differentiated experiences for customers.<sup>1</sup> According to a previous study: "Every experience that a customer has with a field worker is a direct reflection of the brand. Field service technologies empower field workers with a full view of the customer and their assets. Companies can use them to monitor the state of connected assets to proactively — and even preemptively — intervene to maximize cost structures. Continually monitoring



connected assets also helps companies transform from product-based to service-based business models, unlocking new revenue streams. Field service solutions are seeing increased adoption to optimize the schedules, routes, and work of field workers to deliver differentiated experiences."

ServiceNow commissioned Forrester Consulting to conduct a Total Economic Impact<sup>™</sup> (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying ServiceNow FSM.<sup>2</sup> The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of ServiceNow FSM on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five representatives with experience using ServiceNow FSM. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single <u>composite</u> <u>organization</u> that provides service across equipment lifecycles and operates around the globe, including in North America, EMEA, and APAC. The organization's annual revenues are more than \$1 billion.

The interviewees noted that prior to using ServiceNow FSM, their organizations' legacy environments consisted of disparate field service solutions that left them without visibility into operations of other departments or the tools to ensure they deployed the right resources to the right locations with the right parts needed for service. In addition to using legacy tools, some interviewees' organizations relied on manual processes to manage certain aspects of their field service operations. Relying on these disparate solutions or manual processes slowed field service delivery, unnecessarily deployed field resources, decreased customer and employee satisfaction, increased costs, and jeopardized revenue.

After investing in ServiceNow FSM, the interviewees' organizations gained insights into their field service operations and the tools to deliver improved end-toend field services across equipment and service lifecycles. Key results from the investment include a unified view into the full field-service lifecycle, greater efficiency in field service across a range of metrics, an improved rate of deflection, a rationalized field service stack, and cost savings.

Field service efficiency rate

# Up to 16%



# **KEY FINDINGS**

**Quantified benefits.** Three-year, risk-adjusted present value (PV) quantified benefits for the composite organization include:

- Improved field service efficiency of 16%. The composite organization realizes cost savings through a combination of enhanced scheduling of field workers and route management, improved knowledge sharing, and automation. Having a single, accessible overview of all relevant customer details improves the efficiency of field service delivery. Over three years, these efficiencies are worth \$7.2 million to the composite organization.
- Cost savings from field service deflection. ServiceNow FSM empowers the composite organization to avoid truck rolls and control escalations to optimize responses and costs. Over three years, these deflections are worth more than \$7.1 million to the composite organization.
- A single field service system. Replacing multiple disparate legacy solutions with the ServiceNow FSM single solution allows the composite organization to eliminate licensing, integration, and maintenance costs associated with its legacy service stack. Over three years, this is worth more than \$507,300 to the composite organization.

**Unquantified benefits.** Benefits that provide value for the composite organization but are not quantified in this study include:

- Business value add. ServiceNow FSM plays a key role in supporting renewal of existing business as well as expanding into new field service lines of business. The efficiencies and improvements in customer service improves the composite organization's ability to sell services.
- Improved data visibility and single source of truth. Field workers can share knowledge and

expertise through the ServiceNow platform, which helps them manage the full equipment and solve issues with the full force of institutional knowledge. ServiceNow FSM also opens a window across the organization into key KPIs and live dashboards, which enables employees to take action in real time.

- End-to-end equipment and service management and warranty. ServiceNow FSM's end-to-end lifecycle management tools for the equipment and service lifecycle hold significant implications for the composite organization in terms of parts and inventory management. With these capabilities, the composite organization prevents costly parts leakage, handles warranty claims fairly, honors timely replacements, and avoids unnecessary expenses it is not obligated to cover.
- More satisfied employees and customers.
  With ServiceNow FSM, the composite organization provides improved field service that increases customer satisfaction. In addition, ServiceNow FSM's features and user-friendly interface positively affect employee satisfaction.

**Costs.** Three-year, risk-adjusted PV costs for the composite organization include:

 Investment costs including implementation, training, and subscription costs. The composite's implementation costs consist of internal labor for implementation, including for process mapping, change management, and training, as well as fees payable to a third-party implementation team. Its ongoing costs consist of license costs and maintenance.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$14.75 million over three years versus costs of \$3 million, adding up to a net present value (NPV) of \$11.79 million and an ROI of 399%.



"I think the first thing that everyone would say is how easy the accessibility of information is. If you want to see what happened with a customer in the last month, it's one click in the app."

- Head of tools and processes, transportation

#### **TEI FRAMEWORK AND METHODOLOGY**

From the information provided in the interviews, Forrester constructed a Total Economic Impact<sup>™</sup> framework for those organizations considering an investment in ServiceNow FSM.

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 FSM can have on an organization.

#### 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 study to determine the appropriateness of an investment in Field Service Management.

ServiceNow reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

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



#### **DUE DILIGENCE**

Interviewed ServiceNow stakeholders and Forrester analysts to gather data relative to ServiceNow FSM.

#### INTERVIEWS

Interviewed five representatives at organizations using ServiceNow FSM to obtain data with respect to costs, benefits, and risks.



#### **COMPOSITE ORGANIZATION**

Designed a composite organization based on characteristics of the interviewees' 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 interviewees.



#### **CASE STUDY**

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

# The ServiceNow Field Service Management Customer Journey

Drivers leading to the ServiceNow FSM investment

Interviews						
Role	Industry	Region	Field Service Technicians			
Associate CIO	Higher education	US	70			
Head of tools and processes	Transportation	EMEA	100			
VP of global delivery	Service provider	North America	6,000			
Head of enterprise architecture	Construction and engineering services	Global	800			
Director of field service operations	Transportation	US	310			

# **KEY CHALLENGES**

Prior to adopting ServiceNow FSM, the interviewees' organizations managed their field service processes manually through email or spreadsheets, or they relied on a variety of disparate software solutions.

The interviewees noted how their organizations struggled with common challenges, including:

- Siloed solutions. Legacy solutions and processes were not well integrated, which made it difficult or impossible for teams across the organizations to access critical information in real time. Field workers could not share knowledge, and customer frustrations grew as trucks were dispatched missing key parts and with the field workers onboard lacking key skills and background information about the customer and the state of their assets. Some of the organizations used legacy solutions that were difficult or impossible to scale with their other systems.
- Unmeasured and unmet KPIs. Interviewees reported that they had a lack of visibility into crucial performance metrics such as first-time fix rate, field worker utilization, and mean time to

resolution. This deficiency prevented them from effectively monitoring and improving these metrics. Without clear insights into key processes, the organizations occasionally made inefficient field service decisions, such as expending costly resources for site visits that could have been preempted with self-service or solved remotely. This meant the organizations

"With ServiceNow, more people and more roles are able to see activity as it happens versus waiting till the next day. Now we have live views of activity that we really haven't had before."

VP of global delivery, service provider

leaked revenue and expended excessive costly resources.

 Unhappy employees and customers. Field workers found legacy processes and solutions cumbersome to use, and the solutions lacked features that would help them deliver the caliber of service that could lead to renewals, crossselling, or upselling. Improperly balanced workloads degraded service and frustrated field workers when they could not accomplish all they were assigned or when they lacked the knowledge to resolve an issue. Route management and scheduling lacked insight and efficiency. Customer satisfaction was dragged down by downtime, lack of visibility into project status, and slow or ineffective service.

"To figure out detailed KPI development in the last year or average resolution time or topics like these and to identify where there was potential in the service was almost impossible. The legacy system was not made for it, and this was the key point we looked for in a new system because we know and figure this out every year."

Head of tools and processes, transportation

 Increased costs and revenue at risk.
 Interviewees said their organizations incurred substantial costs for their legacy systems that ranged from high parts balance and labor expenses to unnecessary service calls and penalties for missed SLAs. The suboptimal service jeopardized contract renewals and associated revenue, and it inhibited growth of the organizations' field service business. Additionally, customized legacy systems were costly to operate and maintain.

### SOLUTION REQUIREMENTS

The interviewees' organizations searched for a solution that could:

- Deliver end-to-end lifecycle management.
- Break down silos and improve service and efficiency.
- Scale field service business while realizing cost savings.

# **COMPOSITE ORGANIZATION**

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

**Description of composite**. The composite organization is a US-based organization with operations in North America, APAC, and EMEA. The company offers field service to support end-to-end lifecycle management, with use cases ranging from installation to break-fix, servicing, building maintenance, and warranty. It seeks a solution to deliver proactive maintenance and to support SLAs in place with customers. The composite deploys 200 field service field workers to field sites, and they are supported by 20 managers and dispatchers.

**Deployment characteristics.** The organization deploys ServiceNow FSM in a release across the entirety of its support and field service organization.

The initial phase includes skill-set mapping, inventory alignment, and application integration with different business systems — all of which are done within the first five months. The knowledge base is continually built out to improve intelligence about the handling of dispatch, remediation, and self-service.

The composite organization has multiple integrations to ServiceNow FSM throughout its ecosystem, including with its ERP software. The composite's instance of ServiceNow FSM includes a module to integrate contractors as field workers as needed, and the organization pursues a robust integration strategy for multiple types of third-party software, including a CRM solution. It also uses other ServiceNow software including ServiceNow Customer Service Management (CSM).

# **Key Assumptions**

- \$1 billion+ revenue
- 200 field service engineers
- Integrates ServiceNow FSM with CRM and other third-party systems
- Scope of work includes full end-to-end lifecycle

# **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	Field service efficiency gains	\$2,402,400	\$2,839,200	\$3,494,400	\$8,736,000	\$7,155,841	
Btr	Contact center and field visit deflection	\$2,643,264	\$2,861,664	\$3,080,064	\$8,584,992	\$7,082,077	
Ctr	Field service infrastructure rationalization	\$204,000	\$204,000	\$204,000	\$612,000	\$507,318	
	Total benefits (risk-adjusted)	\$5,249,664	\$5,904,864	\$6,778,464	\$17,932,992	\$14,745,236	

#### FIELD SERVICE EFFICIENCY GAINS

**Evidence and data.** Interviewees reported that ServiceNow FSM impacted efficiency in the following ways:

 Provided a single, immediate, and accessible overview of all relevant customer details.
 Interviewees said that because ServiceNow FSM provides real-time visibility, managers could properly track service visits and ensure they deployed the correct workers and parts to each customer's site at the correct time. Field workers could access customer, account, asset, and work order details on tablets and mobile devices, and managers could see real-time status updates and adjust resources accordingly.

A head of tools and processes at a transportation firm said: "The work order sums up all of the work that was done either remotely or in the field, including material, time, in first level, in second level, in third level. Everything the organization was doing on one work order is summed up in a way that the service administration can evaluate each material and time."

 Improved routing, knowledge-sharing, and automation. ServiceNow FSM helped field workers reduce idle time and improve service time per visit. Mobile applications also supported workflows for better and faster resolution. These efficiencies started at the dispatch level, where field service managers could leverage artificial intelligence (AI) and automation, route and schedule management, and work order details as well as other features to ensure the right field workers were dispatched to the right calls, the routes were sensible and efficient, and trucks had the correct parts without surpluses.

The head of tools and processes at a transportation company said: "Everyone is saving time for sure. Especially for the dispatchers, the work balancing saves a lot of time. Also, it's easy for the dispatcher or for the service administration to have a proper work balance between the different field workers because we see all their assignments and everything."

- Provided efficiency and time savings. Interviewees said ServiceNow FSM helped their organizations improve efficiency and save time.
  - A director of field service operations at a transportation company stated, "We were able to absorb the increase in work that has been coming our way during the past two years with our costs remaining flat due to the efficiency gains."

- An associate CIO in higher education shared, "Once they moved to the system, every field worker got about an hour back and improved their utilization because they were able to spend more time on repairs and less time on prep."
- A head of enterprise architecture at a construction and engineering services company said: "The overall field attendance time for a site visit came down from around 7 hours to 3.5 hours, which is a significant gain. Again, the combination of scheduling efficiency and fix efficiency was significant as well."
- A director of field service at a transportation company said, "There's been a real increase in the efficiency. I would say we've seen a 15% to 20% increase as far as dispatching accurately."
- A head of enterprise architecture at a construction and engineering services company said their organization reduced its travel time by 20% to 30% with ServiceNow FSM.

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

- The cost of a field service visit is \$350. This includes the cost of field service labor and other costs such as fuel, wear and tear, vehicle wear and depreciation, and parts.
- Each field worker averages two 3-hour fieldservice visits per day.
- The composite has 260 business days per year.

**Risks.** The following factors may impact the extent to which organizations realize this benefit:

 The size of the company's service organization, including the number of field workers and field visits.

- The cost of each field visit, which could be impacted by the value of parts and other costs associated with operation and deployment of motor vehicles (e.g., fuel costs).
- The fully burdened hourly rates for field workers.
- The field services use cases and objectives contemplated.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$7.2 million.

> "One of the ways Field Service Management reduced idle time is because now we can plan more efficiently and we're having to keep a lot less contingency time."

Head of enterprise architecture, construction and engineering services

Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Field workers	Composite	200	200	200
A2	Field service visits (actual)	2 field service visits per day per field worker*A1*260 days*75% utilization	78,000	78,000	78,000
A3	Cost per field service visit	\$100 per field service person per hour*3 hours+\$50 ancillary costs	\$350	\$350	\$350
A4	Total cost of field service visits annually	A2*A3	\$27,300,000	\$27,300,000	\$27,300,000
A5	Increase in efficiency from proper routing and selection of assets/personnel	Interviews	11%	13%	16%
A6	Savings from intelligent routing based on capability, drive path, and inventory on hand	A4*A5	\$3,003,000	\$3,549,000	\$4,368,000
At	Field service efficiency gains	A6	\$3,003,000	\$3,549,000	\$4,368,000
	Risk adjustment	↓20%			
Atr	Field service efficiency gains (risk- adjusted)		\$2,402,400	\$2,839,200	\$3,494,400
	Three-year total: \$8,736,000		Three-year	present value: \$7,155,	841

# CONTACT CENTER AND FIELD VISIT DEFLECTION

**Evidence and data.** ServiceNow FSM not only improved the efficiency of field visits at the interviewees' organizations, but it also increased the number of cases they were able to deflect with selfservice, resolve remotely, or resolve in fewer visits. This allowed the organizations to incur the costs of field visits, including the deployment of trucks and field workers, only when it was necessary. Interviewees shared the following observations:

 Self-service features such as knowledge portals and greater efficiencies through lifecycle management helped eliminate calls into their organizations' contact centers, which saved time and money. Increased automation meant the organizations could also route cases to the appropriate locations quickly, which saved call time. A VP of global delivery at a service provider shared that their organization gained the ability to solve more than half of all customer calls without having to send field workers on-site.

- A head of tools and process at a transportation company described how ServiceNow FSM helped increase field visit deflection: "We get more detailed descriptions, which can also lead to a deflection when the description points out very clearly that it is a user issue that can be easily explained and solved by sending a knowledge base article. This definitely brings down the number of in-person responses to the site."
- Interviewees said ServiceNow FSM's features such as customizable augmented reality and AI

capabilities helped field workers quickly grasp important details about each site, and recommended best next steps for the field visits. This helped the organizations ensure that field workers went to sites with the personnel, equipment, and background information they needed to resolve cases without unnecessary repeat visits.

- A VP of global delivery at a service provider described a use case for AI: "A field worker, before they go on the call, they use that to understand what the machine history is. It gives them likely parts needed to resolve the issue, and it gives them solutions to what the potential problem could be so they can come on-site being better prepared. And we expect that to pay back in bigger first-time fix improvement. So, it should lead to fewer broken calls or fewer incomplete calls."
- Interviewees also praised the efficiency that resulted from improving visibility across their organizations. This enhanced visibility facilitated knowledge-sharing not only of historical logs and background information, but also of the expertise of experienced field workers. ServiceNow FSM centralized this knowledge and made it readily available through knowledge bases and collaboration features.
- Interviewees reported deflection rates as high as 10% when ServiceNow FSM was integrated with an augmented reality tool for remote resolution.
- Interviewees described how ServiceNow FSM allowed service teams to account for SLAs in prioritizing and optimizing visits for efficiency and to avoid penalties. The VP of global delivery at a service provider said: "Now, we have live views of activity that we really haven't had before. A manager or a manager's manager or the system itself can take action on things that are going well or things that need attention."

 Interviewees reported a range of improvements to first-contact resolution and first-time fix rate after implementing ServiceNow FSM. A head of enterprise architecture at a construction and engineering services company said, "In terms of overall efficiency, we had around a 40% first-time fix rate before ServiceNow, and it has gone to almost 70% at this moment."

> "We sometimes see that things get fixed before our average handling time. And, in those cases, field workers can reassign themselves to other calls that might require attention."

Head of enterprise architecture, construction and engineering

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

- After investing in ServiceNow FSM, the composite fully deflects 4% of field service visits using a combination of self-service features and remote resolution tools that allow field workers to assist without traveling to sites.
- The composite organization has a call center intake for field service calls.
- The fully burdened hourly wage for a worker who intakes calls, provides field service, or dispatches field workers is \$45. These workers include contact center agents who may field intake contacts related to self-service, dispatchers, and field workers who may provide assistance.

- With ServiceNow FSM, the composite organization deflects 8% of cases due to first-visit remediation or preempted visits. The share of cases that are deflected through remediation or preempted visits increases to 9% and 10% in years 2 and 3, respectively.
- On average, a truck roll costs the composite organization \$350.

**Risks.** The following factors may impact the extent to which organizations realize this benefit:

- The industry vertical, the cost of field visits and call center contact points, and the type of work to be completed.
- The effective build-out of a knowledge base and self-service functions, which are based on the resources allocated to the initiative.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of \$7.1 million.

Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Overall field service requests prior to using ServiceNow	Composite	78,000	78,000	78,000
B2	Deflections driven by self-service/remote	Interviews	4%	4%	4%
B3	Average time on a customer service call to diagnose and determine need for truck roll (minutes)	Interviews	12	12	12
B4	Fully burdened hourly cost of a contact center/dispatch worker	TEI standard	\$45	\$45	\$45
B5	Subtotal: Contact center deflections due to self-service and remote	B1*B2*B3/60*B4	\$28,080	\$28,080	\$28,080
B6	Cost per field service visit	A3	\$350	\$350	\$350
B7	Subtotal: Field service visit deflections driven by self-service/remote	B1*B2*B6	\$1,092,000	\$1,092,000	\$1,092,000
B8	Deflections driven by remediation on first visit or preempted visit	Interviews	8%	9%	10%
B9	Subtotal: Savings on deflections due to first visit resolution/preemptive work	B1*B6*B8	\$2,184,000	\$2,457,000	\$2,730,000
Bt	Contact center and field visit deflection	B5+B7+B9	\$3,304,080	\$3,577,080	\$3,850,080
	Risk adjustment	↓20%			
Btr	Contact center and field visit deflection (risk-adjusted)		\$2,643,264	\$2,861,664	\$3,080,064
	Three-year total: \$8,584,992		Three-year p	oresent value: \$7,082,0	77

# **Contact Center And Field Visit Deflection**

# FIELD SERVICE INFRASTRUCTURE RATIONALIZATION

**Evidence and data.** Adopting ServiceNow FSM allowed interviewees' companies to save costs by rationalizing their field service infrastructures.

- ServiceNow FSM replaced multiple legacy solutions. In most cases, the organizations had purchased these legacy licenses in perpetuity, but they were required to make ongoing maintenance investments. In other cases, legacy solutions were software as a service (SaaS) and had ongoing licensing costs that were discontinued.
- By deprecating these solutions, the organizations saved on maintenance costs and effort as well as SaaS subscription costs.

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

- The composite previously had three legacy solutions in place, and each had an average cost of \$200,000 per year.
- Its legacy solutions had a mixture of licenses in perpetuity and cloud-based solutions that required ongoing subscription costs.

"Existing customers are getting more for what they used to get, and new customers are easier to sell to with the whole package and with all the process and accountability that we can put behind that."

Director of field service operations, transportation

**Risks.** The following factors may impact the extent to which organizations realize this benefit:

- The number of legacy solutions the organization previously used.
- The costs associated with the legacy solutions.
- Any ongoing licensing costs to use the legacy solutions.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of \$507,300.

Field	Field Service Infrastructure Rationalization								
Ref.	Metric	Source	Year 1	Year 2	Year 3				
C1	Solutions paid for in perpetuity that are sunset	Interviews	3	3	3				
C2	Estimated cost of a legacy solution	Interviews	\$200,000	\$200,000	\$200,000				
C3	Cost of maintenance and support for legacy solutions	Composite	\$120,000	\$120,000	\$120,000				
C4	Ongoing solution license costs	A1*12 months*\$50 per seat cost	\$120,000	\$120,000	\$120,000				
Ct	Field service infrastructure rationalization	C3+C4	\$240,000	\$240,000	\$240,000				
	Risk adjustment	↓15%							
Ctr	Field service infrastructure rationalization (risk-adjusted)		\$204,000	\$204,000	\$204,000				
	Three-year total: \$612,000		Three-year p	present value: \$507,318	3				

#### **UNQUANTIFIED BENEFITS**

Interviewees mentioned the following additional benefits that their organizations experienced but were not able to quantify:

 Business value add. ServiceNow FSM features were an important part of retaining customer revenue and growing new business streams. The VP of global delivery at a service provider shared: "We have aspirations to service other offerings and lines of business. We believe if we used ServiceNow FSM, we could do that and do more. We've demonstrated that we can take on other demand streams within ServiceNow FSM, but we haven't started servicing other assets or other devices of any kind, which we think there's a potential for."

A head of enterprise architecture at a construction and engineering services company detailed how ServiceNow FSM was key to contributing to a 30% growth in repeat business: "That's because of many operational efficiency activities. But using this field service tool was one of them."

 Improved data visibility and single source of truth. Multiple interviewees spoke to the way ServiceNow FSM's single view, dashboards, and mobile apps made it possible to break down silos and for field workers to share knowledge and collaborate. ServiceNow FSM gave organizationwide windows into KPIs and dashboards, and employees had accessible, real-time views of data.

An associate CIO in higher education described how giving teams access to ServiceNow FSM allowed workers to collaborate to resolve calls: "When assets failed, they needed to get out there and repair them quickly. We gave them access to ServiceNow and the field services module so they could see where things were, and those teams started to work together really well based upon the visibility." ServiceNow FSM made it possible for leaders to be certain that everyone had the same view and could accurately track important metrics. A head of tools and processes at a transportation company said: "You get the right numbers via looking at the usage of those materials and not just relying on what the field workers are telling you and their gut feelings. You can really see in the system what the real numbers are, so that helps a lot."

- End-to-end equipment and service lifecycle management and warranty. ServiceNow FSM also had important implications when it came to managing parts and inventories and preventing costly leakage. The head of tools and processes at a transportation company said: "Now, as everything is base-serialized, we can figure out with the system whether a returned part is out of warranty because it's four years old and not two months old." This allowed the company to approach warranty claims fairly, honor replacements when due, and avoid costs it was under no obligation to pay.
- More satisfied employees and customers. Interviewees commonly reported that employees like using ServiceNow FSM and that they saw measurable increases to employee satisfaction. According to a head of enterprise architecture at a construction and engineer services company, "Our previous <u>Employee Net Promoter Score</u><sup>SM</sup> was around 6.4, and at this point, now I can see on my dashboard it's 8.53." Additionally, interviewees reported their organizations were able to deliver stronger customer service with ServiceNow FSM, leading to improvements in customer satisfaction.

According to interviewees, a range of staff could shift time toward more productive tasks. Whether it was field workers being able to better manage the process and improve uptime and overall service or dispatchers spending less time on manual dispatching tasks and more time analyzing and optimizing their operations, interviewees said their companies could realize more value going forward.

# FLEXIBILITY

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

Increased proactivity and maturity. ServiceNow FSM helps support a proactive approach to meeting SLAs, maintaining uptime, and performing maintenance. A director of field service operations at a transportation company said: "[My organization is] in the middle of the pilot of promoting uptime for our customers' equipment. So, we're just scratching the surface of asset management and configuration items."

Interviewees said AI and automation features helped their organizations anticipate and automatically respond to field service needs. A head of tools and processes at a transportation company said: "ServiceNow definitely helped in that we can very easily qualify usage of materials. This helps a lot in order to identify certain thresholds for automated stock replenishment processes."

A director of field service operations at a transportation company said: "We've been able to automate the dispatching process for our customers. So, by using ServiceNow, we can automatically generate an email from a customer into a service request that's fully qualified and ready to drop into somebody's schedule."

 New technologies. ServiceNow FSM has a range of modules and functionalities including features to allow quoting in the field, and it can partner with solutions offering augmented reality features that help companies build use cases that are tailored to business needs. Interviewees said ServiceNow FSM's twice-yearly updates are easy to manage and come with new features that help their organizations build out new use cases.

An associate CIO in higher education said: "From a platform perspective, it did help people understand that there were more capabilities that we could leverage than just ticketing. And the thing that alerted people to that was the asset management and the asset tracking and the inventory management and that we've continued to use different areas in a way that's been very beneficial to us."

 Scalability and integrations. Interviewees said ServiceNow FSM expands workflows across the ServiceNow ecosystem and integrates well with other third-party software in their environments. They commonly reported workflows across additional ServiceNow offerings as well as multiple integrations with third-party software.

Interviewees commented on the ease and flexibility of integrations. The VP of global development at a service provider said: "We use primarily Android devices in the field, and ServiceNow is an agnostic phone platform or OS system. But ServiceNow manages that on our behalf. In the past, if Android had a significant release, we'd have to do the refactoring to make sure the application stays consistent within that, and we would spend resources. We don't do that anymore."

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

# **Analysis Of Costs**

Quantified cost data as applied to the composite

Tota	Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value	
Dtr	Investment costs	\$1,754,900	\$483,345	\$483,345	\$483,345	\$3,204,935	\$2,956,907	
	Total costs (risk- adjusted)	\$1,754,900	\$483,345	\$483,345	\$483,345	\$3,204,935	\$2,956,907	

### **INVESTMENT COSTS**

**Evidence and data.** Interviewees said their organizations paid investment costs for ServiceNow FSM including licensing fees, internal implementation time, training and change management, and external consultant support.

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

- The composite has 200 field workers and 20 dispatchers.
- The composite's subscription costs are \$100 per seat per month.
- External implementation fees for requirement gathering, data migration, integrations, and testing among others total \$200,000.
- The composite requires process buildouts, training-material development, and control development so administrators and managers can train field workers. Total efforts cost the composite \$90,000 for six weeks of effort from six managers.
- Training and change management for updated workflows and processes requires an investment of seven days of training for dispatchers and field workers. Most effort is during the initial implementation, and ongoing work is minimal.

**Risks.** Costs incurred may vary based on the following factors:

- The organization's compensation rates for staff.
- The degree of customization and change management the organization requires and the length of the implementation process.
- The features and modules to be deployed and the characteristics of the field service environment.
- Industry-specific needs or requirements.

**Results.** To account for these risks, Forrester adjusted this cost upward by 15%, yielding a threeyear, risk-adjusted total PV (discounted at 10%) of \$3 million.

Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
D1	Dispatcher and field worker subscription costs	A1+20 dispatcher licenses*\$100 per seat per month	\$0	\$264,000	\$264,000	\$264,000
D2	Implementation costs - internal	8 FTEs*5 months* \$120,000	\$400,000	\$0	\$0	\$0
D3	External implementation team costs	Interviews	\$200,000	\$0	\$0	\$0
D4	Process mapping, control formation, and training development and administration	6 manager-level FTEs *\$120,000*1.5 months	\$90,000	\$4,500	\$4,500	\$4,500
D5	Change management and training	7 days*A1*\$100+(20 dispatchers*\$45)	\$836,000	\$41,800	\$41,800	\$41,800
D6	Ongoing administration and upkeep of Field Service Management	Interviews	\$0	\$110,000	\$110,000	\$110,000
Dt	Investment costs	D1+D2+D3+D4+D5+D6	\$1,526,000	\$420,300	\$420,300	\$420,300
	Risk adjustment	15%				
Dtr	Investment costs (risk-adjusted)		\$1,754,900	\$483,345	\$483,345	\$483,345

# **Financial Summary**

# CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

### Cash Flow Chart (Risk-Adjusted)



# Cash Flow Analysis (Risk-Adjusted Estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$1,754,900)	(\$483,345)	(\$483,345)	(\$483,345)	(\$3,204,935)	(\$2,956,907)
Total benefits	\$0	\$5,249,664	\$5,904,864	\$6,778,464	\$17,932,992	\$14,745,236
Net benefits	(\$1,754,900)	\$4,766,319	\$5,421,519	\$6,295,119	\$14,728,057	\$11,788,329
ROI						399%

# Appendix A: Total Economic Impact

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

# TOTAL ECONOMIC IMPACT APPROACH

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

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

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

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

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

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# 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%.

# **Appendix C: Endnotes**

<sup>1</sup> Source: "<u>The Forrester Tech Tide™: Extended CRM Technologies, Q1 2021</u>," Forrester Research, Inc., March 9, 2021.

<sup>2</sup> Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

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