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

Business Value Of ServiceNow Customer Service Management

A Total Economic Impact™ Study To Measure Cost Savings And Business Benefits Of ServiceNow Customer Service Management



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ABOUT FORRESTER CONSULTING

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Benefits And Costs



Cost savings from self-service support options:

\$5.4 million



Cost savings leveraging more efficient support channels:

\$1.8 million



Increased revenue from improved customer renewal rates:

\$1.6 million

Executive Summary

ServiceNow commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential ROI enterprises may realize by standardizing on ServiceNow Customer Service Management as the organization's customer support solution across multiple divisions, products, and services. This study provides a framework for evaluating the potential financial impact of investing in ServiceNow Customer Service Management.

Organizations use ServiceNow to deliver a seamless customer service experience across all products and services while driving down costs and improving customer satisfaction. This scalable solution connects teams across departments to quickly find root causes and fix issues, proactively prevents customer calls before they happen, delivers effortless customer and agent experiences, and improves customer relationships and customer satisfaction.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four customers with years of experience using ServiceNow Customer Service Management in business-to-business, business-to-consumer, and automated service support scenarios.

Prior to using ServiceNow for customer service, the customers leveraged multiple solutions across products and support tiers, which led to many inefficiencies, added costs, and missed business opportunities.

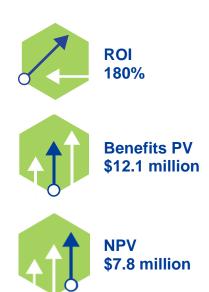
The businesses needed to consolidate and transform their support systems and processes across all products, business units, and geographies, in order to become focused on improving the overall customer service experience. Interviewed organizations identified benefits including: reduced support costs, increased revenue from improved customer retention, new service contracts, and reduced legacy platform costs. These improvements in customer support, as part of an organizationwide strategy to improve customer engagement, have contributed to an average Net Promoter Score (NPS) improvement of 12 points.¹

Key Findings

Quantified benefits. The following risk-adjusted present value (PV) quantified benefits are representative of those experienced by the interviewed companies and summarized as a composite organization:

PREDUCED SUPPORT COSTS ENABLED BY THE SHIFT FROM MORE EXPENSIVE Phone and email contact to web contact options. With ServiceNow Customer Service Management, organizations focused on key support channels to improve efficiency and provide more convenient options for customers. By shifting focus to online support, organizations are able to track and manage contacts more effectively, doing so even for an issue that might cover more products. Support agents can use the workflow capabilities to forward a contact on to someone who is more knowledgeable, while the agent can retain ownership of the contact. For customers, it was also more convenient to use a web portal to submit and track an online request or initiate instant chat (if their support level includes it), leading to higher quality support and easier issue resolution. For a composite organization based on the interviews, web contacts made up only about 40% of all support contacts before the adoption of





ServiceNow; today, that is 90%, meaning many fewer calls come in through the more expensive phone and email channels, adding up to a total benefit of \$1.8 million.

- > Self-service support options result in 15% fewer contacts. Focusing support contact through a web portal also provides convenient ways to highlight self-service options, such as a service catalog for common issues. The composite organization estimates that it has reduced call volume by 15% because customers have been able to find solutions via knowledge articles or other self-service resources, adding up to \$5.4 million in savings.
- Proactive support monitoring. Several interviewed organizations provide cloud services and all of them rely on technology and automation to deliver timely and valuable services to customers. Proactive monitoring helps identify and resolve issues without taking up the time of a support representative, developer, or IT resource especially so if the issue had the possibility of becoming a major problem if not caught quickly. Organizations leveraged the solution's proactive monitoring, which is integrated with other IT systems, to identify an issue, start a workflow to automate and monitor the initiation of self-healing steps, and to either close the case automatically or send an alert to the most appropriate resource. This proactive monitoring reduces the amount of cases that unnecessarily take up employee time as well as it keeps track of all issues for ongoing system review, management, and reporting, adding up to a savings of \$378,000.
- Management productivity improvements allow for support channels to be more convenient by getting customer questions answered more quickly and by providing a window into the status of a customer's case review via the online portal. Most importantly, by avoiding possible customer frustration and dissatisfaction, the reasons to consider alternative vendors are also avoided. Since implementing ServiceNow, the composite organization estimates its customer retention rate has improved from being a half point in Year 1 to being a full point by Year 3. This adds up to \$1.6 million in savings over the three-year analysis.
- Support contract revenue. With the integration of ServiceNow Customer Service Management with enterprise resource planning (ERP), support representatives at interviewed organizations were able to search the customer support contract in order to ensure that a contact was in the correct place for assistance. The support reps could direct a contact entitled to a higher tier of service to the right place for more convenient and specialized help. And if the contact's organization didn't have the level of support agreement that the contact thought they had, support reps could forward the information to a sales rep for further discussion and potential support contract signing or upgrade. Identifying and reaching out to customers to ensure they have the correct service agreement for their needs has led to nearly \$1.3 million in additional support agreement revenue.
- Legacy platform cost savings. For the interviewed organizations, implementing ServiceNow Customer Service Management was an opportunity to standardize their product and service portfolio on a single customer support solution. Prior to implementing, organizations came to the table with their own subscriptions, hardware needs, and specialized skills. Standardizing on ServiceNow has helped organizations to reduce or avoid these costs, adding up to \$1.5 million in savings.

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

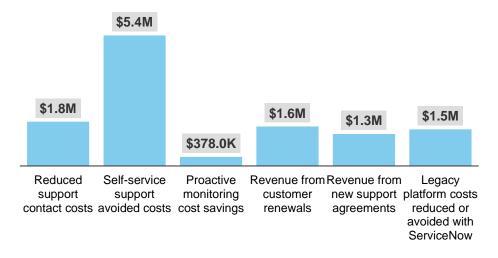
- > Customer revenue. While some direct customer-revenue benefits are quantified, there are even greater revenue opportunities possible with customer service and support. For interviewed organizations, improved support led to the improvement in customer satisfaction and loyalty metrics (as detailed in the Improved Customer Relationships And Customer Satisfaction benefit below). Organizations reported that improved loyalty saw revenue improvements beyond new service contracts and increased renewals. For example, an improvement in customer retention has been identified, but the increased revenue attributed to this improvement has not been directly measured.
- Improved workflow. Along with improved service efficiency, ServiceNow workflow automation features can help improve customer support and other areas of the business. The platform engineering director at a cloud platform provider said: "We have started to look at how can we automate other processes. We keep coming back to ServiceNow."

Costs. The interviewed organizations experienced the following risk-adjusted PV costs summarized as a composite organization:

Investment costs. Costs for this investment in ServiceNow Customer Service Management include upfront services and implementation resource costs and annual subscription, services, and resource costs.

Forrester's interviews with four ServiceNow Customer Service Management customers and subsequent financial analysis found that an organization based on these interviewed organizations experienced benefits of \$12.1 million over three years versus costs of \$4.3 million, adding up to a net present value (NPV) of \$7.8 million and an ROI of 180%.

Benefits (Three-Year)





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 Customer Service Management.

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



The TEI methodology

demonstrate, justify,

tangible value of IT

senior management

initiatives to both

and other key

stakeholders.

business

helps companies

and realize the

DUE DILIGENCE

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



CUSTOMER INTERVIEWS

Interviewed four organizations using ServiceNow Customer Service Management to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewed organizations.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organizations.



CASE STUDY

Employed four fundamental elements of TEI in modeling ServiceNow Customer Service Management's impact: benefits, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

DISCLOSURES

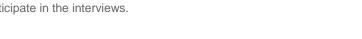
Readers should be aware of the following:

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 Customer Service Management.

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

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





The Customer Service Management Customer Journey

BEFORE AND AFTER THE SERVICENOW CUSTOMER SERVICE MANAGEMENT INVESTMENT

Interviewed Organizations

For this study, Forrester conducted four interviews with ServiceNow Customer Service Management customers. Interviewed customers were all global technology companies, headquartered in the United States (or with a large US division headquarters):

INDUSTRY	INTERVIEWEE	PREVIOUS CUSTOMER SERVICE SITUATION
Business software vendor	Senior director, customer experience	 900 agents 50,000 contacts per month More than 20 different knowledge systems across different products
Online platform services provider	Director, platform engineering	 500 agents 40,000 contacts per month Lack of integration across development, support, and other systems
Online business services provider	Vice president of business application solutions	 100 agents 24,000 contacts per month Little visibility into call tracking and channel usage
Online data analysis services provider	Senior director of customer operations	 1,000 agents 10,000 contacts per month Heavy reliance on email for support, many requests could have been resolved with better self-knowledge systems

Key Challenges

Interviewed organizations outlined the following challenges as a result of their previous customer support environments:

- > Too many support requests were coming in through more expensive and time-consuming channels. A variety of legacy support solutions most often meant contact by phone and email, as setting up a customer support portal for every product was more expensive than simply posting a number or email address. The vice president at a service provider explained: "Historically, customers came from every direction. It may have been an email, a Skype session, or even a Dropbox message." Further, the director of customer operations at a data services provider added, "We had a web portal, but the usage was only around 10%; mainly it was either phone or email." Phone and email channels (and certainly any ad hoc channels) are typically more expensive channels to operate, as each call or message requires added time for rekeying tracking and assignment information. These calls were also less convenient for customers, and any negative experiences could lead to complaints, dissatisfaction, and fewer renewals.
- > Customer support issues were impacting customer retention. "We had to go into six different systems to get information," said the director of customer experience at a software vendor. If a customer request involved more than one representative across product lines, that often meant a customer had to repeat their specific need and wait longer for

"Historically, customers came from every direction. It may have been an email, a Skype session, or even a Dropbox message."

Vice president, online business services provider

"We had a web portal, but the usage was only around 10%; mainly it was either phone or email."

Director of customer operations, data services provider



representatives to research solutions or to find the right knowledgeable resources. These delays had the potential to affect the size and rate of renewals.

- with basic knowledge sharing. A lot of the time spent by customer support representatives was in answering basic questions and completing simple tasks. Many customers preferred to deal with these tasks on their own, but the information needed to complete these tasks was often difficult to find. The director of customer experience at a software vendor said, "There were 10 different places for a customer to go to for information."
- Infrastructure issues, like server reboots, involved too much employee time even when the resolution was automated. Interviewed organizations rely on technology, especially those that deliver cloud services. The platform engineering director at a cloud platform provider explained, "We need to have world-class operations." Technology required reboots, updates, and ongoing monitoring to identify any unscheduled issues. Many of these issues could be handled automatically, but no record was retained, at least within support and service management systems. Creating these records required manual time from customer support representatives.
- thought they had. Customer support representatives would call in with support requests, and they typically wouldn't know what support agreements might be in place, if any. And because customer support systems weren't integrated with ERP data, these requests would be managed and resolved as normal only to later find out that the customer hadn't actually paid for the level of support they received. It was difficult to ask for support payments after the fact, and even if a new contract was signed, it was done much later than it might have been.
- Legacy system support was too varied across products and expensive to maintain. Rather than having existing solutions extended to meet rising customer needs, new support solutions and processes were added to the product and service portfolio. "We've had a number of acquisitions that came with support and CRM platforms that we became responsible for supporting," said the vice president at a services provider. This resulted in too many legacy customer support solutions with licensing costs, specific skill requirements, and management time requirements.

Key Results

The interviews revealed the following benefits of investing in the ServiceNow Customer Service Management solution:

Improved customer Net Promoter Score (NPS). With improved support, as part of a broader strategy to improve customer relationships and satisfaction, organizations that track NPS have seen significant improvement. The composite organization, created to illustrate key metrics in this study and based on the interviews with the four interviewees, reports an increase of 12 points in NPS after implementing the ServiceNow Customer Service Management solution. "There were 10 different places for a customer to go to for information."

Director of customer experience, software vendor



"We need to have world-class operations."

Platform engineering director, cloud platform provider



- issues through more self-service options. Interviewed organizations have been able to improve customers' experience by solving and addressing common questions more quickly via self-service options. The director of customer experience at a software vendor explained, "We want to enable customers to be able to get their own support when they want it." Customer service contacts are also more efficient, using workflow tools to route questions to the right people while maintaining a single point of contact for the customer. The platform engineering director at a cloud platform provider said, "Even if they have to escalate it to another team, the initial responder always owns that ticket through its entire life cycle." Issues can even be identified and resolved before they happen (or even before a customer might need to call in).
- Increased agent productivity. Agents now have better access to customer information, including their transaction data and support history. With an agent workspace providing a single-pane view in ServiceNow, agents no longer need to struggle with finding information that is relevant to the customer's support history and the specific issue they are currently dealing with. Since multiple agents are inputting relevant customer support data into multiple disparate systems, having a single pane view is paramount to agents' productivity. The vice president of a services provider said, "They have doubled their productivity agents have more information, so they are more prepared to handle the issue from the caller." They benefit from an omni-channel view of the customer that integrates with their sales and ERP systems.
- Improved agent satisfaction. With self-service capabilities and automation reducing case volume, customer service agents now have more time to focus on more complex issues and strategic initiatives, rather than spending time addressing routine questions and concerns.
- > Uncovering new revenue opportunities. With greater visibility into customer purchases down to the individual asset level, service representatives are much better equipped to uncover new upsell and cross-sell opportunities.
- More signed service agreements. When the support system is integrated with ERP data for the customer, support levels can be checked to ensure the request matches their license. If there is a mismatch, the agent can still provide support. It's also a best practice to assign a sales representative to follow up and speak with the customer about adding or upgrading their service agreement.
- Reduced legacy platform costs. The interviewed organizations all implemented ServiceNow as a replacement for one or more legacy support systems, leading to reduced licensing costs (as old, multiyear volume license agreements come to an end) and reduced third-party and internal resource time spent dealing with one system versus managing many.

Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. The composite organization is representative of the four companies that Forrester interviewed and is used to present

"We want to enable customers to be able to get their own support when they want it."

Director of customer experience, software vendor



"Even if they have to escalate it to another team, the initial responder always owns that ticket through its entire life cycle."

Platform engineering director, cloud platform provider



"They have doubled their productivity — agents have more information, so they are more prepared to handle the issue from the caller."

Vice president, online business services provider



the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews has the following characteristics:

- Description of composite. The global, multibillion-dollar organization provides technology services to businesses and consumers. This requires a large customer support strategy to manage 50,000 support cases per year across a team of 750 front-line support agents and other developers and engineers that assist with Tier 2 and Tier 3 service requests.
- Deployment characteristics. The organization deployed and integrated ServiceNow Customer Service Management across all product lines, support tiers, and CRM and other systems. This enabled a focus on web versus email or phone contact and more convenient knowledge article management.



Key assumptions

- Revenue of \$2 billion
- 750 Tier 1 support agents
- 50,000 support cases per month (average)
- Support cases divided across phone, email, and web channels

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted) Total costs Total benefits -Cumulative net benefits Cash \$12.0 M flows \$10.0 M \$8.0 M \$6.0 M \$4.0 M \$2.0 M -\$2.0 M -\$4.0 M Initial Year 1 Year 2 Year 3

The financial results calculated in the Benefits and Costs sections can be used to determine the ROI and NPV for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.



These risk-adjusted ROI and NPV values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Table (Risk-Adjusted)								
	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE		
Total costs	(\$1,470,000)	(\$1,155,000)	(\$1,155,000)	(\$1,155,000)	(\$4,935,000)	(\$4,342,314)		
Total benefits	\$0	\$4,566,667	\$4,883,333	\$5,290,000	\$14,740,000	\$12,161,783		
Net benefits	(\$1,470,000)	\$3,411,667	\$3,728,333	\$4,135,000	\$9,805,000	\$7,819,469		
ROI						180%		

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	Revenue from customer renewals	\$450,000	\$675,000	\$900,000	\$2,025,000	\$1,643,125		
Btr	Reduced contact support costs	\$741,000	\$741,000	\$741,000	\$2,223,000	\$1,842,757		
Ctr	Avoided self-service support costs	\$2,187,000	\$2,187,000	\$2,187,000	\$6,561,000	\$5,438,745		
Dtr	Proactive monitoring cost savings	\$152,000	\$152,000	\$152,000	\$456,000	\$378,002		
Etr	Revenue from new support agreements	\$720,000	\$495,000	\$360,000	\$1,575,000	\$1,334,110		
Ftr	Legacy platform costs reduced or avoided with ServiceNow	\$316,667	\$633,333	\$950,000	\$1,900,000	\$1,525,044		
	Total benefits (risk-adjusted)	\$4,566,667	\$4,883,333	\$5,290,000	\$14,740,000	\$12,161,783		

Improved Customer Relationships And Customer Satisfaction

As detailed in the Forrester report, "Transform The Contact Center For Customer Service Excellence," Kate Leggett writes, "Organizations have the opportunity to gain a competitive advantage by delivering a differentiated contact center experience." This strategy can lead to customer loyalty and higher repurchase rates. She continues, "Ultimately, strong contact centers are good for business." Customers expect an easy and convenient experience when they decide to reach out with questions or issues about using a product or solution. While it can be difficult to link customer service satisfaction with specific revenue gains, organizations have several other metrics to rely on, including:

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 more than \$12.1 million.

NET PROMOTER SCORE (NPS)

NPS is a metric that consolidates a number of brand and customer experience parameters. That number is expressed on a scale from -100 to +100. Two of the four interviewed organizations track NPS. One of the two organizations identified more than \$10 million in benefits as a result of ServiceNow Customer Service Management, plus a related NPS improvement of 10 points. The other organization estimates about \$20 million in total benefits as a result of ServiceNow Customer Service Management, with a concurrent NPS improvement of 26 points. The NPS score is a broad metric that involves more than just customer service, but for these organizations the benefits gained from ServiceNow are assumed to be realized along with other benefits enabled by a broader customer relationship improvement strategy.



Customer service management advances contributed to a 12-point increase in NPS.



For the composite organization a similar correlation has been estimated. The total risk-adjusted, present-value of benefits for the three-year analysis period adds up to \$12.1 million. As assumed to be part of a larger customer-first initiative, this NPS improvement is estimated to be an increase of 12 points.

CUSTOMER SATISFACTION

Customer satisfaction in this example refers to the in-house customer relationship metric used by another interviewed organization, based on a number of different factors including survey responses and expressed as a percentage. The interviewee said, "Customer satisfaction has moved up about 2 points from what I've seen."

FORRESTER'S CUSTOMER EXPERIENCE INDEX

Another metric is Forrester's own Customer Experience Index (CX Index™) score, which highlights parameters such as brand recognition, trust, and loyalty — this score can be compared to that of other organizations on a scale of 0 to 100. Furthermore, in the study "How Customer Experience Drives Business Growth, 2018," Forrester has identified correlations between customer growth and improvement in the CX Index score.⁴ For example, it is estimated that a company of similar size as the composite organization, but focused on over-the-top (OTT) internet services, could see both new customer revenue and an improvement in their CX Index score from customer improvement initiatives, including more effective and convenient support channels.

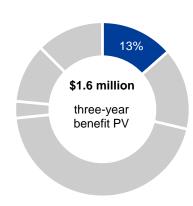
For all of these metrics, the examples and application are focused on scores that start and end around the middle of the index scale. (For example, it is difficult to increase 12 NPS points if you already have a very high NPS score.⁵)

New Revenue From Increased Customer Renewals

Feedback from the composite organization's customers has been extremely positive. They describe the new customer portal as being amazing. The electronic case management system allows for faster and more reliable service compared with their old service database system. The organization's customers appreciate that they can easily access a rich knowledge base and have the ability to drop in screenshots and quickly create cases without a long and complex intake process.

The organization is now able to meet customer service level targets at a much higher rate and route service contacts to the web portal, which is much more convenient — each business customer has their own portal they can share with employees as well as track progress and review support histories. This results in more positive call and case closures.

The organization estimates that ServiceNow Customer Service Management will help improve customer retention by half a percentage point each year. The director of customer experience for a software vendor shared, "A large portion of our retention rate improvement is due to all of the changes that ServiceNow allowed us to do as far standardizing the full experience." The share of organization revenue that is service-based and comes from existing customers is estimated to be 5%. A half-point increase in customer retention results in between \$1 million to \$1.5 million in additional revenue per year.



New revenue from increased customer renewals: 13% of total benefits



New Revenue From Increased Customer Renewals: Calculation Table							
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3		
A1	Total annual revenue		\$2B	\$2B	\$2B		
A2	Estimated annual revenue from customer renewals	A1*5%	\$100M	\$100M	\$100M		
А3	Percentage increase in customer retention		0.50%	0.75%	1.00%		
At	Revenue from customer renewals	A2*A3	\$500,000	\$750,000	\$1,000,000		
	Risk adjustment	↓10%					
Atr	Revenue from customer renewals (risk-adjusted)		\$450,000	\$675,000	\$900,000		

Improvement in customer retention rates can be influenced by a variety of factors, including:

- > The market and competitive landscapes.
- > The average order value of customers.

To account for these factors, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$1.6 million.

Reduced Support Contact Costs

With ServiceNow Customer Support Management, the composite organization is able to more efficiently direct contact traffic toward channels that are both more convenient for customers and less expensive for the organization to operate. Before, support contacts were often taken over the phone — this process was inconvenient for the customer, who would have to wait on hold, navigate call trees, and be shuttled to the right person or department for assistance. This is also expensive for the organization, as phone contacts are usually the most expensive channel to operate. Generally, phone contacts require a dedicated support agent and the organization has to scale the support team in order to make sure that the volume of calls can be met without causing significant customer delays.

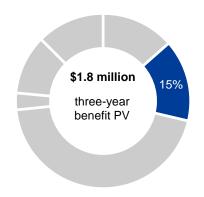
Email is more convenient for customers, as reported by interviewees — with it being the second-most used option. However, the email channel requires additional time for the organization to make sure that all customer service record information is correct and complete.

Furthermore, before ServiceNow, customers trying to contact support faced additional inconveniences when different products or support tiers came with their own phone number or email address. So, a customer calling or emailing with a support request may have to wait to be forwarded to the right team, and once they are forwarded they often have to verbally repeat and walk through their request or need to the new support agent.

With ServiceNow, the composite organization has done a lot of work to encourage customers to send support contact requests through a web portal (or portals). For consumers, this is likely one large support portal, though for businesses a portal can be set up for each business customer to consolidate all product and service support in one place. The director of customer operations at a data services provider explained, "We really trusted what we are offering to the customer with our new ServiceNow



Improved customer retention — 0.5% in Year 1, 0.75% in Year 2, and 1.0% in Year 3 — provided \$1.6 million in benefits over three years.



Reduced support contact costs: 15% of total benefits

portal, and we eliminated the option to interact with email completely."

Portals have become the preferred channel for support contacts, because they enable several benefits beyond simply being a place for customers to conveniently send requests:

- The organization can deliver documentation and other resources that can help answer common questions, even leveraging machine learning technologies to highlight the most relevant articles based on the customer's specific situation, past experiences, or what they have typed in the support ticket window.
- From the one portal page, multiple support options can be delivered, such as an online form, support representative chat, or even phone (for those that still prefer it). These options can be customized for each consumer and business customer based on standard options or a higher tier service level they may have licensed.
- Support team response can now be tracked and managed more effectively, especially for an issue that is escalated to another department using ServiceNow workflow.
- Each consumer or business customer can access service request information — to track the current support request or to review past requests.
- Support agents now have a single window for the agent workspace to manage all support tickets, regardless of product, tier, or even if they've assigned the ticket to someone else for assistance.

For the composite organization, this has led to a significant change in customer support use. Before ServiceNow:

- The phone channel was estimated to be the method of customer contact for 20% of support requests.
- > The email channel was the method of contact for 40% of support .
- The web content channel (including portals that were set up via legacy support platforms) was used 40% of the time.

With ServiceNow Customer Service Management:

- The phone contact channel is still used 10% of the time by customers who choose and prefer phone conversations.
- The web contact channel, via customer service portals, is now used 90% of the time, replacing the need for direct email contact (which after the ServiceNow Customer Service Management solution is 0%).

This change in channel usage delivers cost savings, as:

- > Each phone request is estimated to cost \$30.
- > Each email contact is estimated to cost \$27.
- > Each web portal contact is estimated to cost \$25.

This change in the mix of contact channels has allowed the composite organization to cut back on phone channel bank investments and reallocate those resources on web support. Also, this change ensures that the scale of support requests is met without having to add more phone support agents. With an estimated 50,000 contacts submitted each month, this adds up to an annual cost savings of \$780,000.

The reduction in software development expense will vary with:

"We really trusted what we are offering to the customer with our new ServiceNow portal, and we eliminated the option to interact with email completely."

Director of customer operations, data services provider



Phone contact usage has reduced from 20% to 10%.

Web contact usage has increased from 40% to 90%.



- Over- or under-estimated number of contacts for each channel.
- The cost per channel, which can vary significantly across organizations based on whether support agents are full-time employees or outsourced resources.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of more than \$1.8 million.

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.

Reduce	ed Support Contact Costs: Ca	Iculation Table			
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	Phone contact before ServiceNow	20.0%	10,000	10,000	10,000
B2	Web (portal) contact before	40.0%	20,000	20,000	20,000
ВЗ	Email contact before	40.0%	20,000	20,000	20,000
B4	Total business support contacts before ServiceNow per month	B1+B2+B3	50,000	50,000	50,000
B5	Phone contact today with ServiceNow	10.0%	5,000	5,000	5,000
B6	Web contact today	90.0%	45,000	45,000	45,000
В7	Email contact today	0.0%	0	0	0
B8	Total business support contacts with ServiceNow per month	B5+B6+B7	50,000	50,000	50,000
B9	Cost per phone contact		\$30	\$30	\$30
B10	Cost per web contact		\$25	\$25	\$25
B11	Cost per email contact		\$27	\$27	\$27
Bt	Reduced support contact costs	([contact costs before]- [contact costs today])*12	\$780,000	\$780,000	\$780,000
	Risk adjustment	↓5%			
Btr	Reduced support contact costs (risk-adjusted)		\$741,000	\$741,000	\$741,000

Self Service Support Cost Savings

In addition to a more convenient support channel, portals provide an efficient way to link to additional resources that can often assist in answering a customer's question without having to submit a support request.

The composite organization estimates that about 15% of additional support calls — equaling 7,500 potential calls each month — are avoided because customers are able to quickly and conveniently find answers on their own with access to knowledge articles and, to a smaller extent, automated chat. The vice president for a services provider explained, "We are always looking to see what knowledge-based articles are looked at and if they resolved the issue, and we're constantly going in and making updates."



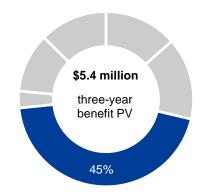
15% of support contacts are avoided with self-service options.



While some setup and management is required to enable the knowledge section of the support portal, the incremental cost of resolving a question that a customer was able to answer on its own is essentially \$0. The director of customer experience at a software vendor said: "I want to see how far we can take it. Chatbots, virtual agents, machine learning, AI — what else can we do from a knowledge perspective to make customers more self-reliant?"

Not only was the organization able to offer a convenient (and usually preferred) support option to these customers, but it was also able to provide for those 7,500 potential calls, estimated to cost the organization about \$27 each, which adds up to more than \$2.4 million each year.

The potential number of support calls can be difficult to estimate without asking every customer about its experience. To account for the variability of the estimated number of calls, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$5.4 million.



Self-service support cost savings: **45%** of total benefits

Self-Service Support Cost Savings: Calculation Table							
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3		
C1	Customer service contacts per month		50,000	50,000	50,000		
C2	Estimated number of additional issues resolved with self-service knowledge resources	C1*15%	7,500	7,500	7,500		
C3	Average cost per contact		\$27	\$27	\$27		
Ct	Self-service support avoided costs	C2*C3*12	\$2,430,000	\$2,430,000	\$2,430,000		
	Risk adjustment	↓10%					
Ctr	Self-service support avoided costs (risk-adjusted)		\$2,187,000	\$2,187,000	\$2,187,000		

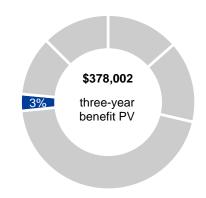
Proactive Monitoring Cost Savings

The event monitoring and analytics of ServiceNow Customer Service Management provides tools for the composite organization to identify, track, and manage common issues — often without a person ever needing to get involved.

The organization has: 1) connected ServiceNow with its cloud service hardware to monitor event logs and 2) set up ServiceNow analytics with rules and thresholds to trigger a service record and initiate a service workflow. Service records are then assigned to the server's own automation agents, in order to either initiate a service restart or a server reboot.

If that task successfully resolves the issue, the ticket is closed, and no actual people were ever involved — though the record of the event and resolution is logged for future service management reporting and analytics. If it wasn't resolved, then that service record is forwarded via ServiceNow to either an IT administrator or a developer for resolution.

The composite organization primarily uses proactive monitoring to identify and manage issues with its own servers (which in turn host the data and services the organization provides its customers). On a smaller scale, proactive monitoring is used to communicate issues or best practices that impact a large number of customers and may require some instructions or self-help resources.



Proactive monitoring cost savings: **3%** of total benefits

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The platform engineering director for a cloud platform provider explained: "We proactively monitor all of our infrastructure environments using a platform of different tools. But if there's an issue, a ticket is created; no one really owns this ticket but first we try to proactively resolve the issue through automation. If automation succeeds, the ticket is closed automatically and the customer never sees anything."

The organization estimates about 300,000 tickets are created each month focused on internal organization issues related to resources dedicated to customer products and services. With ServiceNow, 75% of those tickets are created, assigned, and resolved automatically. This has enabled the organization to avoid having to staff two full-time employees with fully burdened salaries of \$80,000, who were dedicated to resolving these issues, and have moved them to more valuable roles.

To allow for overestimated full-time employee totals and average salaries, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$378,000.

Revenue From New Support Agreements

The composite organization unlocked a new revenue stream when it connected ServiceNow Customer Service Management to its existing ERP system.

Previously, one customer might make several service-oriented calls to the composite organization until someone has a specific reason, usually unrelated to the customer's desires or nee

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The director of customer experience at a software vendor shared its experience: "Implementing ServiceNow led to finding out that we have been providing support over the years to customers that hadn't actually paid for support. So, this has actually restored millions of dollars for our business."

The composite organization estimates \$800,000 in recovered revenue in the Year 1, tapering off to \$550,000 in Year 2, and \$400,000 in Year 3. The amount of revenue that the organization could have received from this specific customer scenario is a difficult-to-estimate and often subjective decision from customer to customer. To allow for overestimated revenue estimates, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$1.3 million.

"Implementing ServiceNow . . . restored millions of dollars for our business."

Director of customer experience, software vendor



Reven	Revenue From New Support Agreements: Calculation Table							
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3			
E1	Revenue from new support agreements		\$800,000	\$550,000	\$400,000			
Et	Revenue from new support agreements	E1	\$800,000	\$550,000	\$400,000			
	Risk adjustment	↓10%						
Etr	Revenue from new support agreements (risk-adjusted)		\$720,000	\$495,000	\$360,000			

Legacy Support Platform Cost Savings

With the implementation of ServiceNow Customer Service Management, along with the organizational goal to standardize support offerings for all products and services, the composite organization has been able to retire or reduce several legacy systems. This includes other support-focused solutions, e.g., CRM solutions that were used specifically for support and other software and hardware platforms.

The organization estimates all these costs add up to \$1 million in software, hardware, services, and added resource time per year. As many of these solutions are part of volume license agreements spread over several years (typically three), the organization estimates it was able to retire and save one-third of this \$1 million total by Year 1, two-thirds by Year 2, and the full amount by Year 3.

For one organization, this benefit was even higher than expected because they were able to implement and migrate to ServiceNow so quickly. Faced with a deadline to renew the license for another full year for a business-critical solution, this interviewed organization was able to completely migrate to ServiceNow in time and avoid that significant cost.



Legacy Support Platform Cost Savings: Calculation Table							
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3		
F1	Annual customer platform legacy platform cost		\$1,000,000	\$1,000,000	\$1,000,000		
F2	Portion of legacy solution cost avoided since ServiceNow		1/3	2/3	100%		
Ft	Legacy platform costs reduced or avoided with ServiceNow	F1*F2	\$333,333	\$666,667	\$1,000,000		
	Risk adjustment	↓5%					
Ftr	Legacy platform costs reduced or avoided with ServiceNow (risk-adjusted)		\$316,667	\$633,333	\$950,000		

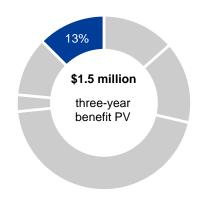
The vice president at an online business service provider said, "We had 29 days to move support of a key customer onto ServiceNow or have to renew an expensive license. We did it within 28 days. We did not have to renew the license and our customer was on a better system."

The total cost and life cycle of legacy platforms is difficult to measure. To allow for overestimated legacy platform costs across the three-year analysis period, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$1.5 million.

Unquantified Benefits

It is difficult to quantify the exact impact of customer service on a broad metric that is influenced by many factors, such as improved sales from year to year. For the composite organization, those unquantified benefits include:

- Revenue attributed to greater customer satisfaction. This includes new sales from customers who've made purchases based on positive word of mouth.
- Improved customer loyalty from proactive communication. Organizations have started to implement ServiceNow proactive support and monitoring — such as the platform monitoring efficiency benefit highlighted in the above <u>Proactive Monitoring Cost Savings</u> <u>section</u>. Organizations will continue to expand efforts to directly communicate with customers to let them know a common issue has been reported before these customers experience it themselves.
- Improved customer loyalty from proactive support. Through additional proactive analysis, broader issues can be identified and sometimes fixed before the customer even knows there's a problem. The director of customer operations at a data services provider explained: "A customer can view the case that was created proactively for them. They can also view how one case can solve multiple issues." Proactive support feedback is positive, and it is expected that customer satisfaction and other key loyalty metrics will show even greater improvement over time.
- > Faster contact resolution time. With the focus on more convenient and efficient contact options, faster call time is harder to measure. If all contacts were all made by phone, this comparison would be much easier, as it is clear to a customer how much time they were wasting while on hold with the old phone support system versus a newer, more efficient phone support system. But with email or web-based contacts, customer wait time is limited, as a person can send a request, get back



Legacy platform cost savings: 11% of total benefits



to work, and wait for the response. Organizations report that direct customer resolution time is reduced — this has also impacted customer satisfaction and loyalty — though it is difficult to measure the waiting time of an email request compared to holding on a telephone call.

Improved first call resolution. First call resolution is also difficult to measure, as support contacts are less and less conducted as a "call," and an email- or web-based contact may require a few questions while still resolving an issue relatively simply and easily. The director of customer operations at a data services provider said: "If it's coming from the portal, then there's actually no call. So, it's not really the right metric. We measure our resolution rate within the first 24 hours, around 30% to 35% for us."

Analysis Of Costs

QUANTIFIED COST DATA

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Gtr	ServiceNow Customer Service Management Implementation Costs	\$1,470,000	\$1,155,000	\$1,155,000	\$1,155,000	\$4,935,000	\$4,342,314
	Total costs (risk-adjusted)	\$1,470,000	\$1,155,000	\$1,155,000	\$1,155,000	\$4,935,000	\$4,342,314

ServiceNow Total Investment Costs

ServiceNow investment costs include upfront implementation time and costs, licensing fees, ongoing management time from internal resources, and some ongoing external consultant assistance. For the composite organization:

- Upfront implementation costs added up to \$1.5 million, including ServiceNow and other third-party implementation services, as well as internal resource time and effort over the nine-month deployment period. Tasks included, retiring legacy systems, data migration and cleanup, and planning and training consultations.
- ServiceNow subscriptions, other services, and internal resources' time add up to less than \$1.2 million per year to provide the ServiceNow solution to all support agents.

As licensing, resource, and third-party costs may be underestimated, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of about \$4.3 million.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the interviewed organization expects risk-adjusted total costs to be a PV of about \$4.3 million.

Implementation risk is the risk that a proposed investment may deviate from the original or expected requirements, resulting in higher costs than anticipated. The greater the uncertainty, the wider the potential range of outcomes for cost estimates.

ServiceNow Total Investment Costs: Calculation Table							
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3		
G1	Investment costs		\$1,400,000	\$1,100,000	\$1,100,000		
Gt	ServiceNow Customer Service Management implementation costs	G1	\$1,400,000	\$1,100,000	\$1,100,000		
	Risk adjustment	↑5%					
Gtr	ServiceNow Customer Service Management implementation costs (risk-adjusted)		\$1,470,000	\$1,155,000	\$1,155,000		

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 Customer Service Management and later realize additional uses and business opportunities, particularly greater use of workflow and automation features available in ServiceNow, including:

- oreater knowledge integration and access. Some of the interviewed organizations have implemented ServiceNow's knowledge solution, primarily for agent use and secondarily for customers. A service portal provides customers a focused place to report an issue, review the progress of open tickets, and look at past issues. It is also a convenient place to highlight new and relevant knowledge articles and other self-service tools like automated chatbots. All interviewed organizations plan to start delivering knowledge articles to customers or expand what they already deliver. The director of customer experience at a software vendor said, "We want our customers to use the portal more and that will include pushing more and more knowledge to our customer base."
- More workflow integration. The vice president at a service provider said, "We're going to do more of that; we're going to be implementing discovery and workflow automation after the first of the year." The platform engineering director at a cloud platform provider added: "We have started to look at how we can automate other processes. We keep coming back to ServiceNow."

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

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

Appendix A: Total Economic Impact

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

Total Economic Impact Approach



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



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



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



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

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

Present value (PV)

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



Net present value (NPV)

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



Return on investment (ROI)

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



Discount rate

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



Payback period

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



Appendix B: ServiceNow Customer Service Management: Overview

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

As companies digitally transform their businesses, providing an exceptional experience that wins the hearts and minds of customers is a top priority. And for good reason. Companies that improve their customer experience increase their revenue and decrease their costs. Customer experience expands the traditional definition of customer service and requires engaging employees and viewing exceptional service as an asset. However, as they undergo this transformation, many customer service organizations struggle with the following:

- Resolving issues quickly. Customers get frustrated having to wait for answers. Yet today's agents struggle with multiple systems, spending hours each week grappling with cumbersome, disconnected, manual service processes.
- Anticipating what customers need. Agents are stuck reacting to customer issues, leaving them little time to focus on getting ahead of issues that affect customers or transformational work. Customer satisfaction declines as they continue to experience issues that disrupt their business.
- **Customers can't help themselves.** Lack of self-service is frustrating for customers and increases manual work for agents. Customers are inconvenienced by having to call to get answers to their problems, frequently having no options that can help them resolve issues themselves.

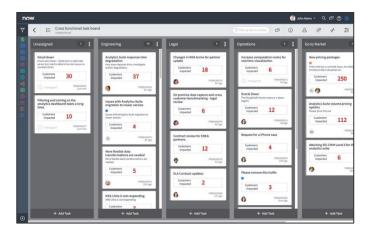
ServiceNow believes the future of customer service lies beyond CRM systems focused on managing customer contact and individual interactions.

ServiceNow Customer Service Management connects customer service teams to the rest of the organization through automated workflows. It helps them get ahead of customer issues and deliver personalized, self-service experiences. With ServiceNow, customer service agents are equipped to fix the root cause of issues, respond faster to concerns, and move beyond operational demands to deliver great service experiences that drive business growth.

ServiceNow Customer Service Management

RESOLVE COMPLEX ISSUES END-TO-END

- Increase customer satisfaction while reducing costs by connecting customer service with other departments using AI and workflow to assign, manage, and resolve complex issues end-to-end.
- Break down silos and automate processes across departments to diagnose and resolve issues faster.
- Route cases to the most qualified agents automatically with machine learning.
- Help agents resolve issues faster with complete visibility in an intuitive workspace.





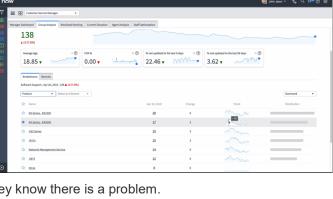
INTELLIGENTLY FIX PROBLEMS BEFORE CUSTOMERS KNOW THEY HAVE THEM

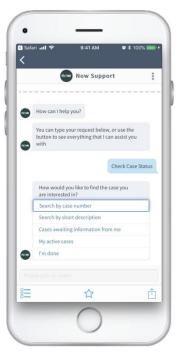
- Monitor trends and customers' products and services to notify customers potentially affected by issues, as well as proactively fix issues before customers know they have them.
- Track the health of customers' products and services to identify potential issues and fix proactively.
- Minimize the impact of critical issues by notifying customers who are most likely to be affected before they know there is a problem.
- > Reduce future case volume by analyzing current and past performance to identify opportunities for automation and self-service.

DRIVE ACTIONS TO INSTANTLY TAKE CARE OF COMMON CUSTOMER REQUESTS

- Deliver a personalized customer experience while increasing agent efficiency by taking care of common customer requests with a portal, service catalog, knowledge base, virtual agent, and online communities.⁶
- Improve service speed and quality by automating requests from issue to resolution.
- Personalize self-service and enable customers to manage their products, services, contracts, and cases when they want.
- Help customers get the best answers, recommendations, and insights from a community of experts.

To learn more about delivering end-to-end customer service that gets ahead of customer problems and drives action to instantly resolve common requests, please visit www.servicenow.com/csm.







Appendix C: Supplemental Material

Related Forrester Research

"How Customer Experience Drives Business Growth, 2018," Forrester Research, Inc., September 21, 2018 "Drive Revenue With Great CX — And Math!," Forrester Research, Inc., February 1, 2017

Appendix D: Endnotes

Consortium for Service Innovation in the "Combined Knowledge Management and Incident Management Products" category as of October 2018. KCS is a service mark of the Consortium for Service Innovation (https://www.thekcsacademy.net/tools/verified-tools/).

¹ Net Promoter and NPS are registered service marks, and Net Promoter Score is a service mark, of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld.

² Source: "Transform The Contact Center For Customer Service Excellence," Forrester Research, Inc., March 19, 2019.

³ Source: Ibid.

⁴ Source: "How Customer Experience Drives Business Growth, 2018," Forrester Research, Inc., September 21, 2018.

⁵ "For brands that don't have a linear relationship between CX and growth, the growth effect of improving CX by 1 point will vary greatly depending on the CX Index score that serves as the starting point for this analysis." For more information, see the "How Customer Experience Drives Business Growth, 2018" Forrester report.

⁶ ServiceNow Customer Service Management is Knowledge-Centered Service (KCS) v6 Verified by the Consortium for Service Innovation in the "Combined Knowledge Management and Incident Management".