



FORRESTER®

The Total Economic Impact™ Of Twilio Messaging

Cost Savings And Business Benefits
Enabled By Twilio Messaging

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ABOUT FORRESTER CONSULTING

Forrester provides independent and objective research-based consulting to help leaders deliver key transformation outcomes. Fueled by our customer-obsessed research, Forrester's seasoned consultants partner with leaders to execute on their priorities using a unique engagement model that tailors to diverse needs and ensures lasting impact. For more information, visit forrester.com/consulting.

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Executive Summary

Technology has expanded the avenues for communicating with customers, but customers have increasingly chaotic experiences because various business units across an enterprise take siloed approaches to their engagement. While 66% of communications decision-makers expect digital to significantly improve their firm's contact-center effectiveness, many companies miss the significant ROI benefits from expanding communications in their other lines of business with optimized content, timing, frequency, channels, and more.¹

Twilio Messaging's multichannel APIs and software enable enterprises to compliantly engage customers on a global scale across their preferred channels, including SMS, MMS, WhatsApp, Facebook Messenger, Google's Business Messages, and chat.

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

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five representatives of organizations with experience using Twilio Messaging. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization that is a B2C company with

KEY STATISTICS



Return on investment (ROI)
132%



Net present value (NPV)
\$2.13M

\$2.5 billion in annual revenue and 15,000 total employees.

The interviewees noted that prior to using Twilio Messaging, their organizations had disparate sets of approaches to their customer communications. These approaches may have included text, email, and even direct mail. However, using these methods yielded limited success and left the organizations with operational inefficiencies that caused additional challenges related to flexibility and scalability to adapt to evolving customer preferences.

After investing in Twilio Messaging, the interviewees' organizations were able to consolidate their outbound messaging efforts. Key results from the investment include improvements in the deliverability of messaging, time recapture among IT developers and contact-center staffs, cost savings related to the consolidation of outbound messaging tech stacks,

Revenue benefits due to 3% increase in messages delivered with Twilio Messaging

\$1.4M (net margin)



and increased revenue opportunities from use cases such as SMS marketing.

KEY FINDINGS

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

- **3% increase in message delivery verses previous provider that results in \$1.4 million in net margin benefits from a total revenue of \$14 million.** By using Twilio Messaging, the composite organization ensures more of its messages are delivered to customers compared to with its prior messaging solution. Key benefits around the value of this improved deliverability include a reduction in revenue leakage from lower refund cases, an improvement in the ability to cross-sell and upsell, and a reduction in lost revenues related to customer no-shows.
- **\$2.1 million in avoided legacy messaging solution cost over three years.** Coming from a prior environment of utilizing disparate point solutions to support its outbound-messaging efforts, the composite organization is able to retire those solutions by using Twilio Messaging. This results in savings related to any per-message fee, maintenance, and licensing costs the organization was previously paying. Over three years, the composite organization realizes \$2.1 million in cost savings related to retiring its legacy messaging solution.
- **15% productivity improvements among development teams.** The composite organization employs a few IT developers to manage its communication and contract-strategy applications. Twilio Messaging's set of APIs and software make it easy for these developers to set up integrations and deploy and maintain the solution, which allows them to be more productive in their work. Over three years, the improvement in IT productivity is worth more than \$156,800 to the composite organization.
- **A 40% drop in customer-care calls and a 15% increase in calls that can be deflected to text, which results in savings of \$67,900.** With Twilio Messaging, the composite organization's customers have better visibility into their order statuses with SMS messages. This means that when customers call the organization's customer-care centers with order-related questions, the composite can deflect them to text or the questions can be completely avoided.

Additionally, the composite organization utilizes Twilio Messaging for specific use cases that may not be applicable to all Twilio Messaging users.

To ensure benefits are not double-counted, Forrester did not include the quantified benefits of SMS marketing for the composite organization, but these benefits are illustrated in this study as different ways the composite organization and its customers may benefit from use of Twilio Messaging.

- **30% to 40% additional opportunity from customers opting into Twilio SMS marketing messaging.** After implementing Twilio Messaging, the composite organization sees 30% of its customers opt into SMS marketing messages during the first year, and 4% of those customers have direct revenue implications because they translate into additional business sold by the organization. For the composite organization, this is worth \$328,000 in net margin from a total revenue of \$3.2 million over three years.
- **Cost savings and avoidance from shifting 65% of direct mail to Twilio SMS marketing.** The composite organization is able to migrate more expensive alternative marketing efforts to Twilio Messaging, which means it is able to realize savings from no longer conducting direct mail marketing. Over three years, these cost savings are worth \$275,000 to the composite organization.

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

- **Enhanced speed to implementation.** Interviewees noted that setting up Twilio Messaging and adding new features or use cases required low involvement and light lifts for their organizations' internal staffs. This means Twilio Messaging accelerates and compounds the time to value for the organizations and their customers.
- **Enriched developer staff employee engagement.** Interviewees said Twilio Messaging's modern technologies management, systems integration, and compatibility with other systems enables their organizations to achieve higher levels of technological performance. They noted how developers appreciate the platform's ease of use, which contributes to their willingness to engage and work on projects involving Twilio Messaging.
- **Customer readiness for staff because customers have real-time updates.** Interviewees said Twilio Messaging enabled their organizations to provide real-time updates to their customers. This directly impacts activities such as ordering services and product delivery in which real-time updates on order statuses could better prepare customers to receive their orders. This speeds up the hand-off process and saves time throughout the delivery process.
- **Improved customer satisfaction.** Interviewees noted that their organizations' customers appreciate having real-time updates into their interactions with the companies, which resulted in improvements to customer satisfaction. Some interviewees said an increase in customer-survey responses is evidence that customers appreciate being contacted via their preferred channels, and the interviewees attribute this visibility to Twilio Messaging.

- **The ability to get all messages out quickly and on time.** Interviewees shared that once their organizations built solutions with Twilio Messaging, the automation enabled them to generate customer communications faster and to deliver them on time without human intervention. This allows their organizations to better plan the best times to engage their customers with more accuracy.
- **Strengthened compliance.** Some interviewees noted that Twilio Messaging plays a role related to their organization's compliance. Some interviewees also said that while their firm's legal counsel makes the final decisions on all things related to compliance, they credited the Twilio team with updating them about regulatory changes related to customer marketing and engagement.
- **Data-driven personalization in customer engagement.** Interviewees highlighted that using Twilio Messaging gives their organizations the ability to create personalized content for customers. Interviewees noted this feature is beneficial, but they said their firms have yet to explore it to its full extent and they are excited about the possibilities.
- **An increase in scalability.** Related to the ease of setting up Twilio Messaging, adding new features and use cases, and the automation introduced, interviewees said they believe the Twilio Messaging platform is fully scalable for increases in volumes or to other regions worldwide. This is crucial to support the organizations' efforts because as their businesses grow, their marketing and customer engagement efforts will also grow accordingly.

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

- **Twilio usage costs totaling \$1.1 million.** The composite organization pays costs to Twilio

based on its usage and per-unit cost.

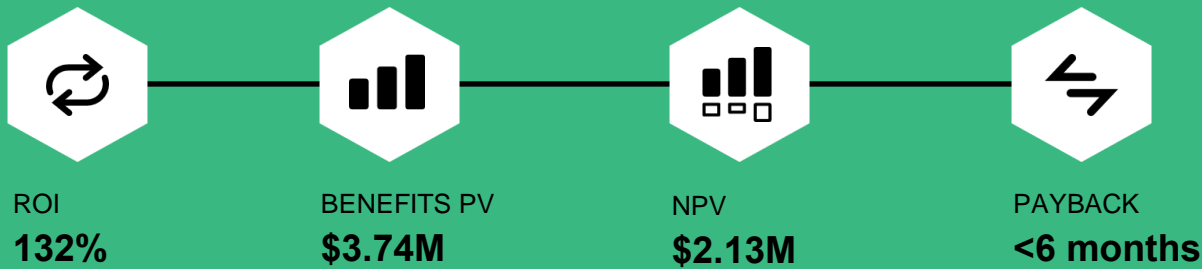
Additionally, to begin using Twilio Messaging, the composite organization pays carrier surcharges and sender-provisioning costs based on the type of sender and number (e.g., short code, 10DLC, toll-free).

- **Implementation costs totaling \$41,300.**

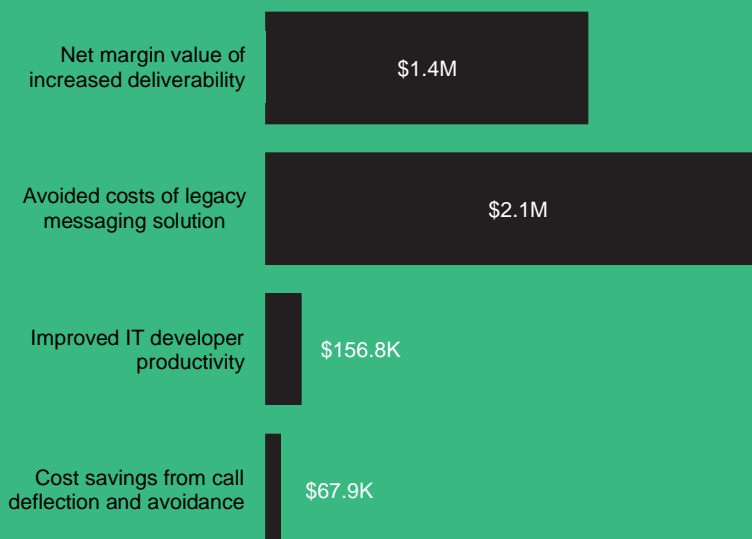
Implementing Twilio Messaging is a relatively light lift for the composite organization when compared to implementing its previous solution from another provider. Activities involved in the setup include evaluating the overall infrastructure, planning the API integration, determining the features and use cases to be set up, and other activities specific to the organization. The composite's implementation costs for Twilio Messaging primarily consist of the salaries for developers who implement and integrate the solution.

- **Ongoing management costs totaling \$447,200.** After the composite organization has Twilio Messaging running, internal staff need to dedicate minimal effort for ongoing management and maintenance. Its costs in this area primarily consist of the salaries for engineers who manage the solution.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$3.74 million over three years versus costs of \$1.61 million, adding up to a net present value (NPV) of \$2.13 million and an ROI of 132%.



Benefits (Three-Year)



Other quantified benefits*

\$328K	\$275K
Increased net margin attributable to Twilio (three-year PV)	Direct-mail marketing cost avoidance (three-year PV)

**Forrester modeled these quantified benefits for the composite organization but did not include them as part of the ROI calculation due to their unique use cases and to ensure the impacts are not double-counted when included with other benefits.*

“Twilio [Messaging] has been one of the better vendor solutions in the space. Not only is it richer capability-wise, [but it is also] more mature. [Twilio Messaging is] more operationally stable, responsive, responsible, and accountable.”

– Director of engineering, healthcare

TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in Twilio Messaging.

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 Twilio Messaging can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Twilio 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 Twilio Messaging.

Twilio 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.

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



DUE DILIGENCE

Interviewed Twilio stakeholders and Forrester analysts to gather data relative to Twilio Messaging.



INTERVIEWS

Interviewed five representatives at organizations using Twilio Messaging 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 Twilio Messaging Customer Journey

■ Drivers leading to the Twilio Messaging investment

Interviews			
Role	Industry	Headquarters	Number of customers
Director of engineering	Healthcare	US	12.6 million
Vice president of e-commerce	Food service	US	400 million
Head of customer messaging	Financial services	Europe	19 million
Vice president of customer relationship messaging	Retail	US	4 million
Head of customer experience and insights	Food and beverage	Europe	1 million

KEY CHALLENGES

Interviewees shared with Forrester that before implementing Twilio Messaging, their organizations used a wide variety of communication channels (e.g., SMS, push notifications, WhatsApp, email, etc.) to get in touch with their customers and drive engagements. However, they said these channels are often siloed between different geographies, business units, and even users.

The interviewees noted how this resulted in common challenges, including:

- **Inability to scale outbound messaging efforts, which impacted deliverability.** As the organizations' businesses grew, so did expectations for customer engagements. However, interviewees said their firms faced challenges when trying to scale their outbound messaging efforts. Increasing the messaging volume would often result in breaking the system and messages not being delivered. The head of customer experience and insights at a food and beverage company shared: "We had tried contacting larger groups of customers on a few occasions, but [my organization's previous solution] could not manage the volume, and it

"We needed greater flexibility, we needed better scale, we needed better overall servicing at a better price point. All the things you want to do better, faster, cheaper."

*Head of customer messaging,
financial services*

kept breaking. [The prior solution] was not designed for mass communication."

- **Operational inefficiency due to disparate channels for customer communication.** Interviewees noted that prior to using Twilio, their organizations often worked with many different point solutions for messaging. These solutions often could not integrate well with one another, and managing the whole portfolio was complex and inefficient. The head of customer messaging at a financial services firm said: "We had 100 different ways in which people were sending

messages out to organizations: by push, text, email, WhatsApp, etc.”

- **Lack of visibility, including real-time updates for customers.** Interviewees said the information their organizations shared in messages to their customers often did not reach them in real time. The vice president of customer relationship messaging at a retail organization noted: “We realized we needed to be able to talk to our customers in a more real-time manner and in a channel they would prefer. [Previously,] our appointment bookings might [have taken] 15 to 30 minutes to get to the customer instead of being [completed in] real time.”

The vice president of e-commerce at a food service company added: “Our prior web-based order tracker was passive, not [a] real-time [tracker]. It was also not matching customer movement to mobile.”

“Some of those promotions ... are to targeted segments that we’re trying to retain or reactivate in a particular way with a special offer. We have seen where we use email and app push to launch the campaign and then follow up with SMS that it does drive activity.”

Head of customer experience and insights, food and beverage

INVESTMENT OBJECTIVES

The interviewees highlighted some of the features their organizations looked at when deciding to invest in Twilio Messaging. These included:

- **The stability and maturity of the solution.** Interviewees shared that their organizations were looking for a solution that was operationally sound and would perform as expected. The director of engineering at a healthcare organization said: “[Twilio] is a very critical capability we offer to our members and consumers as well as [to] our physician population. So, I definitely want to make sure that it’s very stable operationally.”
- **The comprehensiveness of the solution’s features and capabilities.** Interviewees said that to address their organizations’ pain points, they sought a solution with wide ranges of features and capabilities so that it would be applicable to their use cases. The director of engineering in healthcare told Forrester: “We use Twilio primarily for anything that is member-facing. Twilio supports SMS used to send notifications from DNP. [We also use] Twilio for a decision-making framework to determine which tool is most appropriate for which purpose. The availability of key features including SMS, MMS, Conversations APIs, [and] look-up APIs ... [is important].”
- **Having the ability to integrate with other technologies and solutions in the environment.** Some interviewees noted that with the variety of solutions already in place in their organization’s tech stack, they looked for a solution that would have no problem integrating with other solutions. The vice president of e-commerce at a food service company said: “[The solution] needed to easily integrate with our e-commerce applications for messaging things like [updated] order status and delivery status. We wanted a solution with strong developer APIs.”

- **The overall cost of the solution.** Interviewees shared that any opportunity to reduce their organization's overall cost of procuring a solution would get serious consideration. The vice president of e-commerce at a food service company noted: "Our cost of four messages per order can really add up, and there are a lot of SMS vendors in the space. [So,] cost and reliability are primary drivers."

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 B2C company with \$2.5 billion in annual revenue and 15,000 total employees. Its average order value (AOV) is \$80, and this increases by 10% year over year (YoY). The composite organization sends 50 million SMS messages annually, and this grows by 4% each year. In the composite's legacy environment, the cost per message was \$0.02 per message.

Deployment characteristics. The composite organization uses Twilio Messaging to support its SMS and push notifications. Employees who address customer-care issues at its contact centers use Twilio Messaging, and those in other business units use it for use cases such as appointment reminders, transaction notifications, marketing, and more. The organization deploys three engineering developers to be involved with implementation of Twilio Messaging. Once set up, the same three developers allocate 35% of their time to providing ongoing management, overseeing expansion, or making enhancements to the solution.

KEY ASSUMPTIONS

- **\$2.5 billion in annual revenue**
- **15,000 total employees**
- **Uses 3 developers for implementation and ongoing management**
- **Sends 50 million SMS messages annually**
- **Average order value of \$80 with a 10% YoY increase**

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	Net margin value of increased deliverability	\$432,000	\$555,984	\$708,178	\$1,696,162	\$1,384,282
Btr	Avoided costs of legacy messaging solution	\$837,000	\$858,780	\$881,431	\$2,577,211	\$2,132,877
Ctr	Improved IT developer productivity with Twilio Messaging	\$60,750	\$63,180	\$65,707	\$189,637	\$156,809
Dtr	Cost savings from call deflection and avoidance	\$26,301	\$27,353	\$28,448	\$82,102	\$67,889
	Total benefits (risk-adjusted)	\$1,356,051	\$1,505,297	\$1,683,764	\$4,545,112	\$3,741,857

NET MARGIN VALUE OF INCREASED DELIVERABILITY

Evidence and data. Interviewees shared that one of the main benefits of using Twilio Messaging is knowing that their organization's targeted customers receive their messages because of increased deliverability. Each organization values that deliverability differently and has different use cases, but interviewees across various industries unanimously said the deliverability of their firm's messaging and customer-engagement efforts improved with Twilio Messaging.

- The director of engineering in healthcare said: "We know that the message is getting delivered to the consumer. We know that because we can check the log files."
- The vice president of e-commerce in the food service industry laid out exactly how much their organization values deliverability. They said: "If the [messaging] services are down, the impact is to the store [because] they see increased call volumes. This, in turn, means lower quality service and team-member satisfaction. The calling features [also] have operational impacts on drivers not able to call customers if they're late

or unable to find a location. You might end up having missed deliveries, customers [not being] able to call back, and [potential] address issues."

- The vice president of customer relationship marketing in retail noted the difference in effectiveness among engagement channels. They said, "SMS is four to five times more effective in getting you to book an exam than if we do email."

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

- The composite organization sends 50 million messages per year. This figure increases by 4% to 52 million in Year 2, and by another 4% to 54.08 million in Year 3.
- Deliverability of messages with its prior solution provider was 95% per year.
- With Twilio Messaging, the deliverability of messages improves to 98%, which is a 3% increase over its previous provider.
- The financial impact of each delivered message (i.e., the average order value) is \$80. The AOV

grows 10% per year to \$88 in Year 2 and to \$97 in Year 3.

- The percentage of delivered messages that translate to additional revenue (i.e., have a direct financial impact), is 4% in Year 1, 4.5% in Year 2, and 5% in Year 3.
- The net margin of the composite organization is 10%.

Risks. The following risks can impact the incremental value of increased deliverability attributed to Twilio Messaging:

- The size of the organization's customer base and, by extension, the number of SMS messages it sends per year. This may be impacted by the organization's size, industry, region, market position, customer characteristics, etc.
- The legacy messaging solution the organization used prior to using Twilio Messaging. This may impact the deliverability of messages in its prior solution and how it compares to the deliverability of messages using Twilio Messaging.
- The organization's specific business and organizational characteristics. These may impact the average order value or financial impact of each delivered message. They may also impact the percentage of messages with real financial impact to the business.
- The organization's net operating margin.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$1.4 million.

“[The primary benefit of Twilio Messaging] is [that] we’ve increased our deliverability. From doing exactly the same thing, we now reach more customers because of Twilio. The second benefit [is that] it’s simpler to use and cheaper to use [than other solutions]. Taking a blended cost including our infrastructure and everything else, we have a 30% reduction in our overall unit cost.”

*Head of customer messaging,
financial services*

Net Margin Value Of Increased Deliverability					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Number of SMS messages sent per year	Composite	50,000,000	52,000,000	54,080,000
A2	Deliverability of messages with the prior solution	Interviews	95%	95%	95%
A3	Deliverability of messages with Twilio Messaging	Interviews	98%	98%	98%
A4	Percentage point increase in deliverability due to Twilio Messaging	A3-A2*100	3	3	3
A5	Number of incremental messages delivered with Twilio Messaging	A1*A4/100	1,500,000	1,560,000	1,622,400
A6	Financial impact of delivered message (average order value)	Composite	\$80	\$88	\$97
A7	Percent of messages delivering financial impact	Composite	4.0%	4.5%	5.0%
A8	Subtotal: Revenue value of messages that deliver financial impact	A5*A6*A7	\$4,800,000	\$6,177,600	\$7,868,640
A9	Net margin	Composite	10%	10%	10%
At	Net margin value of increased deliverability	A8*A9	\$480,000	\$617,760	\$786,864
	Risk adjustment	↓10%			
Atr	Net margin value of increased deliverability (risk-adjusted)		\$432,000	\$555,984	\$708,178
Three-year total: \$1,696,162			Three-year present value: \$1,384,282		

AVOIDED COSTS OF LEGACY MESSAGING SOLUTION

Evidence and data. Interviewees shared that by using Twilio Messaging, their organizations were able to retire their legacy messaging solutions either partially or completely, which eliminated annual costs including any software licensing fees paid to previous vendors as well as the cost of internal staff who were tasked with maintaining and managing the solution.

- The director of engineering in healthcare told Forrester: “[Operating our previous messaging solution was] a significant cost. It’s not just your licensing fees, it’s also the additional operational costs like maintaining [and] managing these applications on the API.”
- The vice president of e-commerce in food service said: “[Making our custom solutions in our previous environment] could take days or weeks

depending on the service provider. [With Twilio Messaging], it [is] quicker than what it might have been with less quality API integration.”

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

- The composite organization sends 50 million messages per year. This figure increases by 4% to 52 million in Year 2 and by another 4% to 54.08 million in Year 3.
- The average cost per message with the legacy messaging solution was \$0.02.
- With Twilio, the average cost per message is \$0.0079.
- The composite’s average maintenance and license costs of its legacy mobile messaging solution was \$250,000 per year.³

- The professional service spend to support the legacy solution was \$75,000 annually.

Risks. The following risks can impact the actual cost savings of moving to Twilio Messaging:

- The types of solutions the organization used in its prior environment. This may determine the average cost per message and the average maintenance and license costs that the organization actually saves by moving to Twilio Messaging.
- The organization's messaging and customer engagement use cases, which may impact the complexity and types of solutions it used in its prior environment.
- The industry and region where the organization operates. This may impact the licensing costs and professional services spend that are saved.
- The capabilities of the organization's IT staff members who manage and maintain the

“The main efficiencies have come because we are consolidating a central point to then distribution on behalf of the organization.”

Head of customer messaging, financial services

environment. This may impact how quickly the organization can retire its legacy environment.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$2.1 million.

Avoided Costs Of Legacy Messaging Solution

Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Number of SMS messages sent per year	A1	50,000,000	52,000,000	54,080,000
B2	Average cost per message with legacy messaging solution	Interviews	\$0.0200	\$0.0200	\$0.0200
B3	Average cost per message with Twilio Messaging	Composite	\$0.0079	\$0.0079	\$0.0079
B4	Subtotal: Average cost avoidance per message with Twilio Messaging	B2-B3	\$0.0121	\$0.0121	\$0.0121
B5	Average maintenance and license costs savings from legacy messaging solution	TEI standard	\$250,000	\$250,000	\$250,000
B6	Reduction in professional services requirement	TEI standard	\$75,000	\$75,000	\$75,000
Bt	Avoided costs of legacy messaging solution	(B1*B4)+B5+B6	\$930,000	\$954,200	\$979,368
	Risk adjustment	↓10%			
Btr	Avoided costs of legacy messaging solution (risk-adjusted)		\$837,000	\$858,780	\$881,431
Three-year total: \$2,577,211			Three-year present value: \$2,132,877		

IMPROVED IT DEVELOPER PRODUCTIVITY

Evidence and data. Interviewees said setting up, maintaining, and using Twilio Messaging required a relatively light effort from their organizations. They also said the solution has a robust set of APIs that was easy to set up and integrate with other solutions in their tech stacks and that adding new features and customizing the solution to their specific use cases was quick and easy. This means developers can now use the time saved or avoided to do other productive work.

- The director of engineering in healthcare said: “We had a ‘hackathon’ where we pushed through three additional APIs into the prototype phase, and we could do that in literally two weeks or less.”
- The vice president of e-commerce in the food service industry said, “Within a two-week development iteration, we were able to add SMS messaging for our international markets.”
- The head of customer messaging at a financial services company shared: “It’s not overly heavy lifting from what [my organization’s developers] tell me. [The engineers really get on with the] interoperability with the APIs, ... including the engineering documentation or API specs, etc.”
- The vice president of customer relationship messaging in retail told Forrester, “I think [Twilio Messaging] removed 5% to 10% of the workload [of our staff members] and freed them up to focus on patient care.”

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

- The composite employs three developers who are involved with implementation and integrating Twilio Messaging with the organization’s other tech stack (e.g., marketing, CRM, communication systems).

“One of the biggest benefits [of Twilio Messaging] has been developer [friendliness]. [Twilio has] a robust set of APIs that are easy to integrate and implement. The services have [also] been reliable. We’ve had good success with their deliverability and reliability of messaging.”

Vice president of e-commerce, food service

- The average fully burdened annual salary of an engineer is \$150,000. Adjusting for inflation, this increases by 4% to \$156,000 in Year 2 and to \$162,240 in Year 3.
- By using Twilio Messaging, each IT developer realizes a 15% productivity improvement.

Risks. The following risks can impact the time savings and, by extension, the productivity gains an organization may realize by moving to Twilio Messaging:

- The number of IT developers involved in managing communication and contract strategy applications including Twilio Messaging.
- The organization’s industry and operating region, which can impact the average fully burdened salary of an IT developer.
- The skills and knowledge of the organization’s IT developers. This may impact the percentage of work related to Twilio Messaging and, by extension, the percentage improvement in productivity as a result of the time savings.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$156,800.

Improved IT Developer Productivity					
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Number of IT developers who manage communication/contract strategy applications	Interviews	3	3	3
C2	Average fully burdened salary of an IT developer	TEI standard	\$150,000	\$156,000	\$162,240
C3	Percentage improvement rate for IT developer productivity with Twilio Messaging	Interviews	15%	15%	15%
Ct	Improved IT developer productivity	C1*C2*C3	\$67,500	\$70,200	\$73,008
	Risk adjustment	↓10%			
Ctr	Improved IT developer productivity (risk-adjusted)		\$60,750	\$63,180	\$65,707
Three-year total: \$189,637			Three-year present value: \$156,809		

COST SAVINGS FROM CALL DEFLECTION AND AVOIDANCE

Evidence and data. Interviewees noted that the various routing features of Twilio Messaging are valuable for their organizations, because they allow them to deflect — if not completely avoid — customer calls. Additionally, by giving customers better visibility into things like order status, the organizations can avoid receiving contact-center calls, or they can answer questions via text as opposed to phone. This resulted in cost savings for contact-center staff.

- The vice president of e-commerce in the food service industry said: “[Twilio Messaging has] intelligent routing for those that return calls and caller ID messaging. If the order is still in progress, we route up to the driver’s phone number without customers having the driver’s actual phone number. If the order is complete, we will route that call back into the store.”
- The director of engineering in healthcare said: “Every single missed appointment [is] at least 1

hour of lost productivity time for at least two to three people on the clinical side, and that includes] doctors and their prep time. We have about 43% of our messages going to appointment events.”

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

- The composite receives 18,000 customer-care calls per year. These calls are longer in nature, and staff members need more time to fill them. Year-over-year, that figure increases by 4% to reflect business growth, which results in receiving 18,720 customer-care calls in Year 2, and 19,469 in Year 3.
- The composite organization avoids 40% of those calls each year due to the enhanced customer visibility from Twilio Messaging updates.
- The average cost per customer-care call is \$3.53.

- Beyond the customer-care calls, the organization deflects an additional 15% of shorter calls to Twilio Messaging each year. These calls do not require as much of the staff's time.
- The average cost to service each of those additional calls is \$1.18 versus \$3.53 for a longer customer-care call. That is a cost benefit of \$2.35 per serviced call.

Risks. The following risks can impact the cost savings an organization realizes from call deflection and avoidance:

- The average number of customer-care calls the organization receives each year.
- The complexity in addressing the topics the organization's customers call about, which impacts the percentage of calls that can be avoided with Twilio Messaging in place.
- The complexity of each request, which impacts the organization's average cost per call.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$67,900.

Cost Savings From Call Deflection And Avoidance					
Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Number of customer care calls in prior environment	Composite	18,000	18,720	19,469
D2	Percent of calls avoided with Twilio Messaging	Composite	40%	40%	40%
D3	Number of calls avoided due to enhanced customer visibility into order status or service updates with Twilio Messaging (rounded)	D1*D2	7,200	7,488	7,788
D4	Average cost per call	Composite	\$3.53	\$3.53	\$3.53
D5	Subtotal: Call cost-avoidance savings	D3*D4	\$25,416	\$26,433	\$27,492
D6	Percent of remaining calls deflected to SMS with Twilio Messaging	Interviews	15%	15%	15%
D7	Number of calls deflected to SMS (rounded)	(D1-D3)*D6	1,620	1,685	1,752
D8	Cost of servicing customer-care question through SMS	D4/3	\$1.18	\$1.18	\$1.18
D9	Subtotal: Savings from servicing customer-care question through SMS (rounded)	(D4-D8)*D7	\$3,807	\$3,960	\$4,117
Dt	Cost savings from call deflection and avoidance	D5+D9	\$29,223	\$30,393	\$31,609
	Risk adjustment	↓10%			
Dtr	Cost savings from call deflection and avoidance (risk-adjusted)		\$26,301	\$27,353	\$28,448
Three-year total: \$82,102			Three-year present value: \$67,889		

INCREASED NET MARGIN ATTRIBUTABLE TO TWILIO MESSAGING

Evidence and data. Some interviewees said the improved deliverability of Twilio Messaging had a direct impact on their organization's topline revenue growth. They shared how their firms incorporated Twilio SMS messages into larger marketing campaigns and how customers converted on those specific SMS touchpoints.

Because there are risks of double counting with the other quantified benefits, Forrester did not include this benefit in the composite's ROI. It's included here to illustrate the different ways an organization can benefit from using Twilio Messaging.

- The head of customer experience and insights at a food and beverage company said their organization used Twilio Messaging in its marketing campaign strategy. For the marketing campaign, the firm sent customers four email messages, two push notifications through the company's phone app, and two SMS texts. The interviewee said: "[Our Twilio Messaging] SMS campaign last week was the third-ranked source of traffic to our website, which is huge. Our analysts are excited with this new strain of traffic and conversion." The interviewee noted that 30% of their organization's customers opted into the SMS marketing messages.
- The vice president of e-commerce in the food service industry said: "We have seen improvements in operational efficiency and improvements in [NPS](#)SM (Net Promoter Scores). With those two things, we can translate into improved order frequency."
- The vice president of customer relationship messaging in retail said: "We've seen a reduction in no-shows from 12% to under 10% since doing this, and [a] 2% [difference] is a big number when you're talking about [customers] not showing up. [Twilio Messaging] has been a significant driver of [our] reduction in no-shows."

"I think SMS is one extra slice to improving outreach. And it's measurable in real time as well, so we can see the results immediately online from an SMS [campaign touch], which is fantastic."

Head of customer experience and insights, food and beverage

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

- The composite has 1 million customers and a 4% annual growth rate. This leads to increasing its number of customers to 1,040,000 in Year 2, and to 1,081,600 in Year 3.
- 30% of the customers opt into SMS marketing communications in the first year. This percentage increases to 35% in Year 2 and to 40% in Year 3.
- The conversion rate of customers who purchase based on SMS marketing messages and purchases that have a direct financial impact is 4% in Year 1, 4.5% in Year 2, and 5% in Year 3.
- The average order value is \$80. This AOV grows by 10% per year to reach \$88 in Year 2 and \$97 in Year 3.
- The composite organization's net margin is 10%.

Risks. The following risks can impact the total increase in revenue an organization realizes from using Twilio Messaging:

- The size of the organization and its SMS marketing effort, which impacts the number of customers it has and the percentage of

customers who opt into SMS marketing communication.

- The characteristics of the organization's customers, which may impact the additional percentage of customers who convert due to Twilio Messaging improving SMS marketing campaigns.

- The characteristics of the organization's business impacts, average order value, and net operating margin.

Results. If Forrester included the impact of this benefit in the composite organization's ROI, it would adjust the benefit downward by 10% due to the aforementioned risks. This would yield a three-year risk-adjusted total PV of \$327,600.

Increased Net Margin Attributable To Twilio SMS Marketing Messaging					
Ref.	Metric	Source	Year 1	Year 2	Year 3
X1	Number of customers	Composite	1,000,000	1,040,000	1,081,600
X2	Percentage of customers who opt into SMS marketing communication	Interviews	30%	35%	40%
X3	Subtotal: Total customers who opt into Twilio SMS marketing messages	X1*X2	300,000	364,000	432,640
X4	Customer conversion rate with Twilio SMS marketing messages	A7	4.0%	4.5%	5.0%
X5	Total customer conversions	X3*X4	12,000	16,380	21,632
X6	Average order value	Composite	\$80	\$88	\$97
X7	Subtotal: Increase in revenue attributable to Twilio Messaging	X5*X6	\$960,000	\$1,441,440	\$2,098,304
X8	Net margin	Composite	10%	10%	10%
Xt	Increased net margin attributable to Twilio SMS marketing messaging	X7*X8	\$96,000	\$144,144	\$209,830
	Risk adjustment	↓10%			
Xtr	Increased net margin attributable to Twilio SMS marketing messaging (risk-adjusted)		\$86,400	\$129,730	\$188,847
Three-year total: \$404,977			Three-year present value: \$327,644		

DIRECT-MAIL MARKETING COST AVOIDANCE BY SHIFTING TO TWILIO SMS MARKETING

Evidence and data. Some interviewees told Forrester their organization's previous marketing efforts included sending direct mail but that by moving to Twilio Messaging, the firm realizes savings and cost avoidance related to its previous direct-mail marketing activities.

The head of customer experience and insights at a food and beverage company said: "We used to do a lot of direct mail. We then made the decision to move away from direct mail and invest more in developing the digital [communications]. There's huge cost savings in moving away from pipe to digital."

Because there are risks of double-counting with the other quantified benefits, Forrester did not include this benefit in the composite's ROI. It's included here to illustrate the different ways an organization can benefit from using Twilio Messaging.

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

- The composite sends 1 million pieces of direct-mail marketing annually.
- The cost of shipping a piece of marketing material is \$0.189.⁴
- The percentage of direct-mail marketing the composite can discontinue by shifting to Twilio SMS marketing is 65% per year.
- This benefit provides the composite with one-time cost savings realized immediately in Year 1. In Years 2 and 3, the benefit is a cost avoidance due to not having to continue to pay for direct mail.
- If the composite does not use Twilio Messaging, it would still have to pay for direct mail each year.

Risks. The following risks can impact the benefits from direct-mail marketing cost avoidance:

"We're paying maybe a fraction of a penny, but [Twilio Messaging] is worth a dollar per message. When we're trying to drive our marketing-dollar commitments, it is a major component of it."

Vice president of customer relationship messaging, retail

- The full extent of the organization's direct-mail marketing effort that can be fully or partially discontinued with Twilio Messaging. This impacts the number of direct-mail pieces sent annually and the percentage that can be shifted to Twilio Messaging.
- The region where the direct-mail marketing effort takes place, which may impact the cost of shipping.

Results. If Forrester included the impact of this benefit in the composite organization's ROI, it would adjust this benefit downward by 10%. This would yield a three-year, risk-adjusted total PV of \$275,000.

Direct-Mail Marketing Cost Avoidance By Shifting To Twilio SMS Marketing					
Ref.	Metric	Source	Year 1	Year 2	Year 3
XX1	Number of direct-mail marketing pieces sent annually	Interviews	1,000,000	1,000,000	1,000,000
XX2	Cost of shipping per piece	Composite	\$0.1890	\$0.1890	\$0.1890
XX3	Percentage of direct-mail marketing shifted to Twilio SMS marketing messages	Interviews	65%	65%	65%
XXt	Direct-mail marketing cost avoidance by shifting to Twilio SMS marketing	XX1*XX2*XX3	\$122,850	\$122,850	\$122,850
	Risk adjustment	↓10%			
XXtr	Direct-mail marketing cost avoidance by shifting to Twilio SMS marketing (risk-adjusted)		\$110,565	\$110,565	\$110,565
Three-year total: \$331,695			Three-year present value: \$274,959		

UNQUANTIFIED BENEFITS

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

- **Enhanced speed to implementation.**

Interviewees shared that setting up Twilio Messaging at their organizations was a relatively light lift. The director of engineering in healthcare noted: “We used three APIs at max. Once it [was] orchestrated, there [wasn’t] much [else] we needed to do, [other than make] sure that the configurations we have are updated.”

The head of customer messaging supported this point and highlighted the role of Twilio’s customer support staff. They said: “We’ve done some custom build with them, which they have accommodated. That was done quicker than we could actually utilize it, which is a testament to either the focus they are putting on our account or the strength of their development team.”

- **Enriched developer staff employee engagement.** The vice president of e-commerce in the food service industry said: “[Twilio Messaging] is certainly a better product [than other solutions and] developers appreciate using [it]. They have been positive in any feedback that they’ve given around integration with Twilio [Messaging], using their console, [and] using their APIs. It is a spot where developers look when implementing new functionality to see what Twilio has to offer and continue to use their product versus searching for alternatives when Twilio has a feature that is available.”

The head of customer messaging in financial services said: “One of the reasons [my organization’s engineers] love Twilio is [that] it is easy to use. [For] the time and effort [required] even just trying to understand what it is, the documentation is clear. There’s a lot of content out there that they can read, which is what they tend to like doing from [a] business-engagement perspective.”

- **Customer readiness for staff because customers have real-time updates.**

Interviewees noted that Twilio Messaging allowed their organizations to create real-time updates for their customers. This means customers are ready to receive their orders when they arrive, which creates operational-efficiency improvements in the delivery process. The vice president of e-commerce in the food service industry told Forrester: “We were launching a GPS-based order-tracking system that provides real-time location tracking. We want to entail some of the additional customer push messaging to give people a heads up when drivers are going to be coming. So, it’s more efficient for our drivers in those cases because customers [are] ready to go.”

“[Downtime] is quite damaging because we’re sending 24/7 messaging: real-time passcodes, stop payments, etc. We had all sorts of stuff [where] things go wrong in [our] infrastructure. We never had any of that [with Twilio Messaging].”

Head of customer messaging, financial services

- **Improved customer satisfaction.** Interviewees noted that their organizations’ customers are much happier with their messaging engagements since switching to Twilio Messaging. The director of engineering in healthcare said: “Anecdotally, customers are very happy. They have migrated to Twilio-based solutions from [prior messaging platforms] primarily because of the lack of

maturity that was offered by those other vendors.”

Interviewees also noted that the visibility from Twilio Messaging allowed their organizations to know their customers’ channel preferences. The vice president of customer relationship messaging at a retail company said: “Before we switched over to Twilio [Messaging], we were using a third party to send an email to customers with a link to take a survey. We ended that service and started moving over to Twilio and using a text-message-based survey. We were getting about 8% of people completing the survey when it was [via] email. We’re now getting about 13% of people completing the survey when it’s [via] SMS. So, [we’ve seen] a significant increase in [customers] providing the survey data by moving to a channel I think more people prefer to use [versus customers] clicking links and going off somewhere.”

- **The ability to get all messages out quickly and on time.** Interviewees noted that with Twilio Messaging, generating messages is a purely automated process that gives their organizations the ability to launch any messaging campaign quickly and in real time. The vice president of customer relationship messaging in retail said: “Transactional messages [and] recall messages run automatically. [We can] send appointment

“We were looking for a way to give more real-time push communications, especially as people are moving to mobile environments.”

Vice president of e-commerce, food service

“The benefit [of Twilio Messaging] is [that] as business changes, we know we can quickly pivot. If something happens and we need to quickly and rapidly communicate [something] to our customers, I know that we can do that [with] Twilio [Messaging] as a channel. The flexibility and ability to react to the changing business is great.”

Vice president for customer relationship messaging, retail

reminders via SMS instead of [via] human callers. I don’t have a number, but there’s a significant reduction in labor hours that were previously spent on the phone because now we allow [customers] to confirm via text.”

- **Strengthened compliance.** Interviewees shared that Twilio Messaging helped their organizations stay updated on regulatory changes, specifically those related to customer engagement. The vice president of customer relationship messaging in retail noted: “As regulation changes, [Twilio Messaging] gives us regular updates. Obviously [and] ultimately, we rely on our legal counsel to tell us what right and wrong is. But [Twilio representatives] are always super quick to give us their understanding of these changes [and they share] links to government sites that we can read ourselves so that we can pass to our legal counsel.”
- **Data-driven personalization in customer engagement.** Interviewees shared that the

breadth of features and functionalities available in Twilio Messaging provides opportunities to create personalized content to support messaging and customer-engagement efforts. The vice president of e-commerce at a food service company said: “Personalization is a large interest area. We do less-sophisticated personalization, [but] I think the suite of services gives us flexibility and options for future use cases that we have not yet integrated today. I think it sets up the platform for future scaling.”

- **An increase in scalability.** Interviewees said they believe that as their organization’s business grows, its messaging and customer engagement efforts would grow as well, and that there would not be any problem with the scalability using Twilio Messaging. The head of customer messaging at a financial services company said: “We’re a complex organization, and we’re in the process of transitioning traffic [to Twilio Messaging]. We are expecting 5% growth in SMS, which will all be in Twilio, as well as a 50% to 60% increase in Twilio volume.”

“We can think about having a response campaign built where we can get instant scores back from customers. We can use MMS and include visual of new product. There [are] a lot of different things that we can get to that do not involve siloed promotion.”

Head of customer experience and insights, food and beverage

FLEXIBILITY

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

- **Continuously improving net margin.** With the operational efficiency gains that Twilio Messaging provides, it is possible that the net margin on which an organization operates may improve on a year-to-year basis. Because Twilio reduces costs or overhead to service customers, there is potential for continued improvement in the margin.
- **Moving into the next phase.** Interviewees shared that with the operational efficiency gains their organizations have realized since using Twilio, they can start thinking about how best to drive the businesses forward as it pertains to marketing and customer engagement. The head of customer messaging at a financial services firm said: “The next phase is [addressing] how ... we get better at understanding that messaging journey [in order] to optimize it. [So far,] we have been tidying up all the stuff we’ve messed up behind the scenes. [Now,] we’ll get into how ... we really start to accelerate and go forward to make sure these are the best, slickest, finest customer experiences you can have.”

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

Analysis Of Costs

■ Quantified cost data as applied to the composite

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Twilio usage costs	\$0	\$434,500	\$451,880	\$469,955	\$1,356,335	\$1,121,539
Ftr	Internal labor costs for Twilio implementation and integration	\$41,250	\$0	\$0	\$0	\$41,250	\$41,250
Gtr	Twilio ongoing management costs	\$0	\$173,250	\$180,180	\$187,387	\$540,817	\$447,196
	Total costs (risk-adjusted)	\$41,250	\$607,750	\$632,060	\$657,342	\$1,938,402	\$1,609,985

TWILIO USAGE COSTS

Evidence and data. Twilio Messaging is priced at a per-unit cost. Messages sent or received on the Twilio platform are included in the usage pricing charged to the organization. Rates may vary due to the contractual terms agreed upon.

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

- The composite organization sends 50 million messages per year. This number increases by 4% to 52 million in Year 2 and by another 4% to 54.08 million in Year 3.
- The average cost per message using Twilio Messaging is \$0.0079.
- Pricing may vary. Contact Twilio for additional details.

Risks. Other than the cost of usage volume on the Twilio platform, other costs to consider include:

- **Carrier fees.** SMS and MMS carrier fees are typically charges that mobile carriers apply to certain types of message traffic. Because carriers apply this charge regardless of the platform used, Forrester did not include it in the calculation table below, but readers should include this when

“[Twilio Messaging] is a low-cost, quick-to-market tool [that] takes minimal technical knowledge to stand something up. You can get the product out quickly. Time to market, ease of use, and low cost would all be the primary values to me.”

Vice president of customer relationship marketing, retail

calculating the full cost of implementing Twilio Messaging.

- **Sender type (number type).** Organizations may pay additional fees depending on the sender type used (e.g., short code, toll-free, A2P 10DLC, or alphanumeric). These charges can vary depending on the country of origin, the number's operator, the type of short code (i.e., random code versus vanity code), etc.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of \$1.1 million.

Twilio Usage Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
E1	Number of messages per year	Composite	0	50,000,000	52,000,000	54,080,000
E2	Average cost per message using Twilio Messaging	Interviews	\$0	\$0.0079	\$0.0079	\$0.0079
E3	Twilio Messaging costs	E1*E2	\$0	\$395,000	\$410,800	\$427,232
Et	Twilio usage costs	E3	\$0	\$395,000	\$410,800	\$427,232
	Risk adjustment	↑10%				
Etr	Twilio usage costs (risk-adjusted)		\$0	\$434,500	\$451,880	\$469,955
Three-year total: \$1,356,335			Three-year present value: \$1,121,539			

INTERNAL LABOR COSTS FOR TWILIO IMPLEMENTATION AND INTEGRATION

Evidence and data. Interviewees noted that setting up Twilio Messaging at their organizations required a relatively light lift. Initial conversations typically revolved around understanding the tech environments, the API integrations that needed to be made, traffic volume, and preregistration of messages.

- The vice president of customer relationship messaging in retail said: “In terms of deploying messages, [Twilio’s] API structure and documentation is pretty clear. If you know how to work with APIs, you just call the API, send the payload, and it goes. You can read [Twilio’s] documentation. Essentially, in no time, you are ready to go. So, the learning curve, if you already know it, is very light. Depending on how complicated you want it to be, [deploying Twilio] from scratch can be done in two weeks.”
- The head of customer messaging in retail added: “In terms of setting up [Twilio Messaging], it’s

relative light touch. [We had] a couple of conversations on traffic volume, configuration, preregistration of messages, etc. But compared to what other [vendors] we’ve dealt with [require], it’s pretty straightforward.”

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

- The composite employs three developers who are involved with implementing and integrating Twilio Messaging with the composite organization’s tech stack (e.g., marketing, CRM, and communication systems).
- The implementation and integration process takes one month.
- The fully burdened monthly salary of a developer engineer is \$12,500.

Risks. The actual costs related to implementation and integration of Twilio may vary depending on:

- The scope of the organization’s business.
- The complexity of the integration.

- The number of IT resources required and their average fully burdened monthly salaries.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of \$41,300.

Internal Labor Costs For Twilio Implementation And Integration						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Number of developer staff members tasked with implementing and integrating with marketing, CRM, and communications systems	Interviews	3	0	0	0
F2	Number of months required for implementation and integration	Interviews	1	0	0	0
F3	Fully burdened monthly salary of a developer engineer	TEI standard	\$12,500	\$0	\$0	\$0
Ft	Internal labor costs for Twilio implementation and integration	F1*F2*F3	\$37,500	\$0	\$0	\$0
	Risk adjustment	↑10%				
Ftr	Internal labor costs for Twilio implementation and integration (risk-adjusted)		\$41,250	\$0	\$0	\$0
Three-year total: \$41,250			Three-year present value: \$41,250			

TWILIO ONGOING MANAGEMENT COSTS

Evidence and data. Interviewees noted that once their organizations set up Twilio Messaging, internal staff do not have to put much effort into maintaining and managing the platform. Their typical involvement is to add new features and use cases to the platform.

- The director of engineering in healthcare shared: “We roll out three to four features every month. For each one of them, we have either a combination of SMS and push and email or SMS or push, but SMS is the lowest common denominator for many of the features going out.”
- The vice president of customer relationship messaging in retail said: “[Unless] there’s new development, [our lead developer] can go months without ever touching Twilio because, again, most of the applications are built and run

automatically. Most of that requires no effort unless something goes down. In a slow period, [our lead developer] might spend 1% of their time on Twilio. In development-heavier times, they might spend 10% to 15% of their capacity in Twilio.”

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

- Once the composite organization sets up Twilio Messaging, the ongoing management and maintenance involves three development engineers who allocate 35% of their time to ongoing management, expansion, or enhancements to the solution.
- The average fully burdened annual salary of a development engineer is \$150,000. Adjusted for

inflation, this increases by 4% to \$156,000 in Year 2 and to \$162,240 in Year 3.

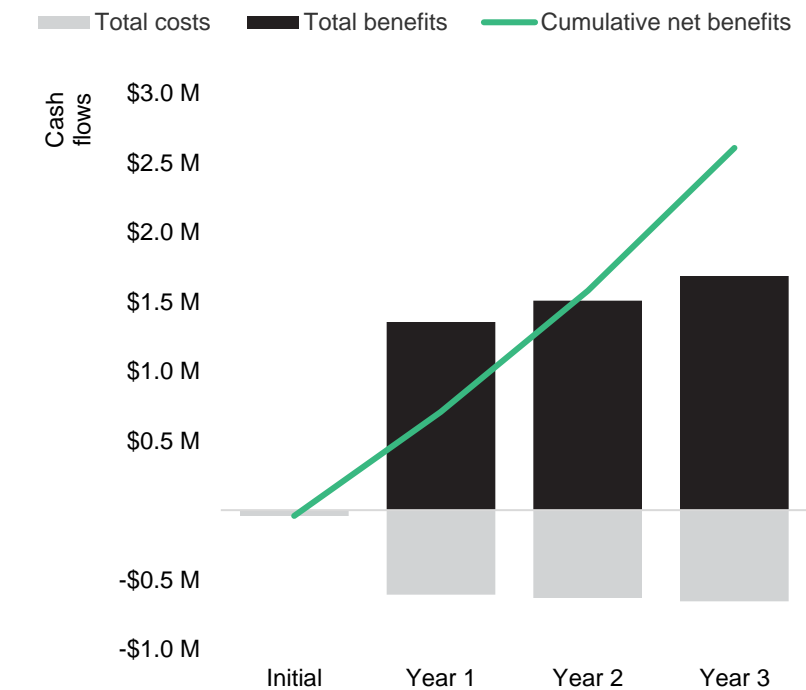
Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of \$447,200.

Twilio Ongoing Management Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
G1	Number of development engineers	Composite	0	3	3	3
G2	Fully burdened salary of an engineer	TEI standard	\$0	\$150,000	\$156,000	\$162,240
G3	Percentage of engineering time spent on maintenance	Interviews	0%	25%	25%	25%
G4	Percentage of engineering time spent on building IP using Twilio APIs	Interviews	0%	10%	10%	10%
Gt	Twilio ongoing management costs	$G1 \cdot G2 \cdot (G3 + G4)$	\$0	\$157,500	\$163,800	\$170,352
	Risk adjustment	↑10%				
Gtr	Twilio ongoing management costs (risk-adjusted)		\$0	\$173,250	\$180,180	\$187,387
Three-year total: \$540,817			Three-year present value: \$447,196			

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)



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

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

Cash Flow Analysis (Risk-Adjusted Estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$41,250)	(\$607,750)	(\$632,060)	(\$657,342)	(\$1,938,402)	(\$1,609,985)
Total benefits	\$0	\$1,356,051	\$1,505,297	\$1,683,764	\$4,545,112	\$3,741,857
Net benefits	(\$41,250)	\$748,301	\$873,237	\$1,026,421	\$2,606,709	\$2,131,872
ROI						132%
Payback						<6 months

Appendix A: Total Economic Impact

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

TOTAL ECONOMIC IMPACT APPROACH

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

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

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

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

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: Endnotes

¹ Source: “The Forrester Tech Tide™: Contact Center Technologies For Customer Service, Q1 2021,” Forrester Research, Inc., January 19, 2021.

² 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.

³ Source: “Mobile Messaging FAQ: How Much Does A Mobile Messaging Program Cost?,” Forrester Research, Inc., March 30, 2020.

⁴ Source: “[Mailing & Shipping Prices](#),” USPS, 2023.

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