A Forrester Total Economic Impact™ Study

Commissioned By Sailthru

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The Total Economic Impact™ Of Sailthru

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ABOUT FORRESTER CONSULTING

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Executive Summary

Sailthru commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) that midsize ecommerce companies or enterprises may realize by deploying Sailthru. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Sailthru on their organizations. To better understand the benefits, costs, and risks associated with using Sailthru, Forrester interviewed an existing Sailthru customer.

Using Sailthru, the organization:

- **Transitioned from a linear analytics cycle to a dynamic analytics model.**
- **Enabled dynamic customer segmentation rather than managing segmentation via lists.**
- **Increased the depth and length of the average customer engagement.**

As a result, the organization realized:

- **Incremental revenue of $14.2 million.**
- **Avoided costs of more than $3.2 million.**

Prior to Sailthru, the interviewed organization used a leading email service provider (ESP) and an internally developed recommendation engine that failed to meet management expectations. By manually managing customer and noncustomer lists, the organization could not adequately segment customers or manage campaigns. The marketing manager told Forrester, “At one point, we were maintaining thousands of lists for all the different campaigns. It is extremely difficult to customize for different lists and to keep all the pieces organized.”

The organization used Sailthru to build customer insights using multiple sources of customer data and anonymous web traffic data - including omnichannel, first party explicit and implicit interest data, and device data collected via Sailthru and third-party data collected via the organization's own sources. Sailthru consolidated the data into a single database and created rich user profiles to improve the organization's ability to target, acquire, and engage customers on an individual level rather than through batch and blast campaigns. As a result, the organization engaged a higher percentage of customers and sold more to each engaged customer — thereby increasing average order value and customer lifetime value — while also activating a higher percentage of non-customers (customers that exist in lists that have yet to initiate a purchase) and increased spending from disengaged customers. Sailthru became a critical component of the organization’s marketing ecosystem, replacing three vendors, building a holistic view of customers, moving from a campaign-driven marketing model to a customer-centric model, and enabling real-time action.

SAILTHRU ENABLES HIGHER CUSTOMER ENAGAGEMENT RATES

Forrester’s interview with an existing customer and financial analysis found that the organization experienced the risk-adjusted ROI, benefits, and costs shown in Figure 1. Over three years, the model shows investment of more than $2.1 million that yields incremental revenue of more than $14.2 million. The investment also avoids costs of more than $2.4 million and an ROI of 123% with a payback period of less than one month.

FIGURE 1
Financial Summary Showing Three-Year Risk-Adjusted Results

Incremental revenue: $14.2 million	**Incremental revenue: +7.5%**	**Return on investment: 123%**	**Payback period: 0.9 months**

Source: Forrester Research, Inc.

- **Benefits.** The interviewed organization experienced the following risk-adjusted benefits:
  - **Increased spending from engaged customers.** By using Sailthru to improve the targeting and impact of emails on an individual customer basis, the organization realized an increase in spending by existing and newly acquired customers of 7.5%, equaling incremental revenue of more than $14.2 million over three years and a risk-adjusted impact of $741,344 in net profit.
  - **Reduced level of disengaged customers.** Prior to adopting Sailthru, a steady number of customers disengaged by changing their email preferences, engaging with other suppliers, or ignoring email campaigns. When the organization began using Sailthru, fewer customers disengaged. Specifically, the rate at which customers disengaged dropped from 13% to 6% per month. Because customers remained engaged longer, using Sailthru increased sales by more than $5.5 million revenue over three years, providing $288,301 in risk-adjusted profit, also over three years.
  - **Avoided cost of previous email service provider.** The organization terminated its license with its previous ESP, which was based on the volume of email. The agreement with Sailthru is an enterprise license and allows the organization to experiment with emails that incur no additional cost. The risk-adjusted savings of eliminating the previous ESP is more than $3.2 million over three years.
  - **Eliminated cost of internally built recommendation engine.** Before adopting Sailthru, the organization was developing an internal recommendation engine that would have cost $590,790 over three years to continue developing and refining.
- **Costs.** The interviewed organization experienced the following cost:
  - **Enterprise subscription for Sailthru.** The organization paid for an enterprise license to use Sailthru. The license included Sailthru's email platform; automation and personalization capabilities across email, mobile, and on-site; and Sailthru Advanced Analytics, a business intelligence tool focused on marketing data. The costs also include onboarding and implementation costs of $52,800, totaling more than $2.1 million over three years.

Disclosures

The reader should be aware of the following:

- The study is commissioned by Sailthru 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 Sailthru.
- Sailthru 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.
- Sailthru provided the customer names for the interview but did not participate in the interviews.

TEI Framework And Methodology

INTRODUCTION

From the information provided in the interviews, Forrester constructed a Total Economic Impact (TEI) framework for organizations evaluating Sailthru. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

APPROACH AND METHODOLOGY

Forrester took a multistep approach to evaluate the impact that Sailthru can have on an organization (see Figure 2). Specifically, Forrester:

› Interviewed Sailthru marketing and sales executives, as well as Forrester analysts, to gather data relative to the marketplace for Sailthru.

› Interviewed a marketer currently using Sailthru to obtain data with respect to costs, benefits, and risks.

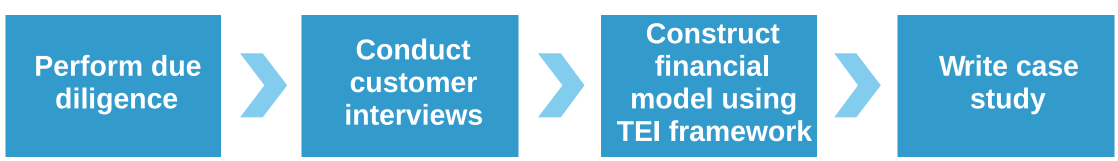
› Constructed a financial model using the TEI methodology. The financial model is populated with the cost and benefit data obtained from the interview and applied to a composite organization.

› Adjusted for risk. In a typical TEI project, interviewed organizations provide cost and benefit estimates. But sometimes interviews include a broad range of responses or outside forces that might affect the results. For that reason, some cost and benefit totals have been risk-adjusted. Risk adjustments are explained in each relevant section.

Forrester employed four fundamental elements of TEI in modeling Sailthru: 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.

FIGURE 2
TEI Approach



Source: Forrester Research, Inc.

Analysis

INTERVIEW HIGHLIGHTS

Forrester interviewed an ecommerce organization that provides storefronts for several clothing distributors. The interviewed organization has annual sales of $75 million and is growing at 16% annually, almost entirely through email marketing and the contextual recommendations produced based on the behavioral and interest data that Sailthru collects.

Situation

Before implementing Sailthru, the organization ran hundreds of email marketing campaigns each year, but struggled because it:

- Relied almost entirely on the current email campaigns to generate revenue and meet the growth targets promised to investors.
- Experienced high dissatisfaction with the previous ESP, largely due to segmentation limitations and the organization's admittedly "quirky, nonstandard implementation."
- Built an internal recommendation engine that never delivered on management expectations.
- Proliferated thousands of customer lists for different industries and marketing campaigns.
- Contracted with multiple vendors to manage the end-to-end marketing process.
- Conducted testing on a separate platform.
- Spent multiple days building the data analysis needed to drive thoughtful strategies, but was still unable to deliver personalized, real-time marketing programs.

> *"We were maintaining thousands of lists for all of our different campaigns."*
>
> ~ Marketing manager, ecommerce organization

Solution

The organization selected Sailthru to both replace its previous ESP and retire the internally built recommendation engine. Sailthru's integrated system provided both the recommendation engine and email system that allowed the organization to bypass manual segmentation, effectively operate across channels, collect omnichannel interest and behavioral data, and personalize engagements to each individual user. Through the use of omnichannel consumer data (email, on-site, mobile, social, and purchase data), the customer now automatically manages its total email marketing program and on-site recommendations in order to reduce shopping cart abandonment, increase average order value, and increase customer lifetime value..

Results

After adopting Sailthru, the interviewed organization benefited from:

- **Replacing its linear analytics cycle with a dynamic analytics model.** The organization no longer operates in linear analytics cycles, allowing its marketing team to immediately and automatically leverage results without taking the time to pull reports and manually synthesize data.

- **Transforming the roles of key individuals.** By automating analytics and eliminating the manual nature of managing lists, the organization freed up staff that now focuses on marketing strategy and contributes directly to driving financial results.

- **Moving beyond batch-and-blast campaigns to advanced personalization techniques.** Using Sailthru, the organization builds individual consumer interest graphs that detail behavioral, interest, and purchase data from consumer web browsing, email engagement, conversion, and many other data sources. Following extensive and rigorous testing, this data is then used to personalize content based on the individual buyer's interest graph. The marketing manager said, "On top of that, we're able to use those interests to build out other spots within the emails that are dynamic. We are able to have different slots dedicated to jewelry, accessories, or other items dynamically generated off their interests."

"We automatically trigger secondary campaigns that target high-value customers that come in through specific channels."

~ Marketing manager, ecommerce organization

BENEFITS

The organization realized a number of quantified benefits in this case study:

› Increased spending from engaged customers.

› Reduced level of disengaged customers.

› Avoided cost of previous email service provider.

› Eliminated cost of building an internal recommendation engine.

Increased Spending From Engaged Customers

The interviewed organization identifies “engaged customers” as a unique set that comprises 30% of buyers (the remaining 70% are buyers who made a one-time purchase or make infrequent purchases). Analysis of the buying behaviors from engaged customers shows that using Sailthru as an integrated email and recommendation engine boosted revenue from engaged customers at an annualized rate of 18%. Using the organization’s profit margin of 6%, the increased revenue results in more than $14.2 million in net profit during Year 1 and more than $1.7 million over three years.

Forrester believes that while readers of this study will realize an impact on the average spending by customers, the precise level of spending that readers will experience will be affected by many variables. As such, Forrester risk adjusts the value of this benefit down by 13% to reflect this uncertainty (see Table 1).

TABLE 1
Increased Spending From Engaged Customers

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
A1	Annual revenue (growing 16% per year)		$75 million	$87 million	$101 million
A2	Percentage of revenue from engaged buyers		30%	30%	30%
A3	Uplift in revenue from engaged buyers attributed to using Sailthru		+18%	+18%	+18%
A4	Profit margin		6%	6%	6%
At	Increased spending from engaged customers	A1*A2*A3*A4	$243,000	$281,880	$327,240
	Risk adjustment		↓ 13%		
Atr	Increased spending from engaged customers (risk-adjusted)		$211,410	$245,236	$284,699

Source: Forrester Research, Inc.

Reduced Level Of Disengaged Customers

The interviewed organization indicated that some customers continually disengage, such as change their email preferences, engage with other suppliers, or ignore email campaigns. Before using Sailthru, customers disengaged at a rate of 13% per month. By using Sailthru to improve the targeting and delivery of compelling, personalized emails, the organization found that the rate at which customers disengaged dropped to 6%. The improvement in the percentage of customers that disengage on a monthly basis results in an increase in net profit of $331,380 in Year 1. Because the impact on the decay rate of customers is likely to vary between companies, Forrester risk adjusts the financial impact of this benefit downward by 13%.

TABLE 2
Reduced Level Of Disengaged Customers

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
B1	Annual revenue (growing 16% per year)		$75 million	$87 million	$101 million
B2	Percentage of revenue from engaged buyers		30%	30%	30%
B3	Reduction in disengaged customers		7%	7%	7%
B4	Profit margin		6%	6%	6%
Bt	Reduced level of disengaged customers	B1*B2*B3*B4	$94,500	$109,620	$127,260
	Risk adjustment		↓ 13%		
Btr	Reduced level of disengaged customers (risk-adjusted)		$82,215	$95,369	$110,716

Source: Forrester Research, Inc.

Avoided Cost Of Previous Email Service Provider

After adopting Sailthru, the interviewed organization terminated its license with its previous ESP. Because the ESP contract was based on the volume of emails sent, Forrester shows the savings increasing year over year. The interviewed organization made special mention of shifting from a volume-based ESP to the enterprise license with Sailthru as a key financial benefit. Because most organizations will be able to retire their existing ESP solution upon licensing Sailthru, Forrester risk adjusts the benefit downward by 6%.

TABLE 3
Avoided Cost Of Previous Email Service Provider

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
C1	Volume-based email service provider	+20% yearly	$950,000	$1,140,000	$1,368,000
Ct	Avoided cost of previous email service provider		$950,000	$1,140,000	$1,368,000
	Risk adjustment		↓ 6%		
Ctr	Avoided cost of previous email service provider (risk-adjusted)	Ct*94%	$893,000	$1,071,600	$1,285,920

Source: Forrester Research, Inc.

Eliminated Cost Of Internal Recommendation Engine

Before adopting Sailthru, the interviewed organization was developing an internal recommendation engine. At the time that the organization began using Sailthru, it estimates that additional development would require the developer full-time equivalents (FTEs) shown in Table 4. Forrester risk adjusts the benefit downward by 6%.

TABLE 4
Eliminated Cost Of Internal Recommendation Engine

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
D1	Developers (full-time equivalent)		1.5	1.5	1.5
D2	Burdened cost for developers	$135,000*D1	$202,500	$202,500	$202,500
D3	Maintenance for system hardware		$7,000	$7,000	$7,000
Dt	Eliminated cost of internal recommendation engine	D2+D3	$209,500	$209,500	$209,500
	Risk adjustment		↓ 6%		
Dtr	Eliminated cost of internal recommendation engine (risk-adjusted)		$196,930	$196,930	$196,930

Source: Forrester Research, Inc.

Total Benefits

Table 5 shows the total of all benefits across the five areas listed above, as well as present values (PVs) discounted at 10%. Over three years, the interviewed organization expects risk-adjusted total benefits to be a PV of more than $3.9 million.

TABLE 5
Total Benefits (Risk-Adjusted)

Ref.	Benefit	Initial	Year 1	Year 2	Year 3	Total	Present Value
Atr	Increased spending from engaged customers	$0	$211,410	$245,236	$284,699	$741,344	$608,763
Btr	Reduced level of disengaged customers	$0	$82,215	$95,369	$110,716	$288,301	$236,741
Ctr	Avoided cost of previous email service provider	$0	$893,000	$1,071,600	$1,285,920	$3,250,520	$2,663,569
Dtr	Eliminated cost of internal recommendation engine	$0	$196,930	$196,930	$196,930	$590,790	$489,736
	Total benefits	**$0**	**$1,383,555**	**$1,609,135**	**$1,878,265**	**$4,870,955**	**$3,998,809**

Source: Forrester Research, Inc.

COSTS

The interviewed organization pays a fixed enterprise license fee to Sailthru of $700,000. The organization incurred $52,800 in onboarding fees, which included setup and configuration of Sailthru. The organization told Forrester that the internal cost for staff to configure and begin using Sailthru was nominal.

The email marketing manager said, “I didn’t feel like there was a huge learning curve. Sailthru has been pretty great to work with because they had dedicated implementation engineers. Even now if something comes up, they have been willing to send people on-site for a couple of days to work through any kind of issues.”

The interviewed organization’s pricing follows Sailthru’s standard pricing. As a result, Forrester increased the costs by 6% to adjust for risk, indicating that readers have little risk of variation in pricing (see Table 6).

TABLE 6
Enterprise Subscription For Sailthru

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
E1	Annual subscription			$700,000	$700,000*	$700,000*
E2	Onboarding costs		$52,800			
Et	Enterprise subscription for Sailthru (not risk-adjusted)	E1+E2	$52,800	$700,000	$700,000	$700,000
	Risk adjustment		↑ 6%			
Etr	Enterprise subscription for Sailthru (not risk-adjusted)		$52,800	$700,000	$700,000	$700,000

*Year 2 and Year 3 pricing is assumed based on Year 1 actuals.

Source: Forrester Research, Inc.

TABLE 7
Total Costs (Risk-Adjusted)

Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Enterprise subscription for Sailthru	$52,800	$700,000	$700,000	$700,000	$2,152,800	$1,793,596
	Total costs	**$52,800**	**$700,000**	**$700,000**	**$700,000**	**$2,152,800**	**$1,793,596**

Source: Forrester Research, Inc.

FLEXIBILITY AND ENHANCED CAPABILITIES

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for some 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. There are multiple scenarios in which a customer might choose to implement Sailthru and later realize additional uses and business opportunities. Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A). The interviewed organization highlighted the following additional benefits as a result of its investment:

- **Increased retention of loyal, engaged customers and diversified revenue stream.** The interviewed organization developed a base of engaged customers so that only 50% of its revenue directly results from email campaigns. The marketing manager at an ecommerce organization told Forrester, “It’s allowed us to be less emotionally driven and make sure that our performance is normalized. We used to be so focused on revenue for any given marketing campaign that we didn’t put as much effort into planning how to develop loyal, engaged customers.”

- **Increase the dynamic hotspots in emails to exponential levels.** The interviewed organization is able to dynamically build emails for different audiences by using the Sailthru recommendation engine. “That’s very different than building a dynamic email based on the product that a person uses. This is more like marketing merchandizing that is dynamically tailored to a person’s interest algorithmically,” said the marketing manager at an ecommerce organization

- **Introduced flexibility to do more longitudinal testing and more sophisticated modeling of lifetime value netted against acquisition cost.** For example, the organization is able to track revenue intake by day of different acquisition sources and marketing treatment groups to better optimize media buying/planning efforts.

RISKS

Forrester defines two types of risk associated with this analysis: “implementation risk” and “impact risk.” “Implementation risk” is the risk that a proposed investment in Sailthru may deviate from the original or expected requirements, resulting in higher costs than anticipated. “Impact risk” refers to the risk that the business or technology needs of the organization may not be met by the investment in Sailthru, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for cost and benefit estimates.

Quantitatively capturing implementation risk and impact risk by directly adjusting the financial estimate results provides more meaningful and accurate estimates and a more accurate projection of the ROI. In general, risks affect costs by raising the original estimates, and they affect benefits by reducing the original estimates. The risk-adjusted numbers should be taken as “realistic” expectations since they represent the expected values considering risk.

TABLE 8
Benefit And Cost Risk Adjustments

Benefits	Adjustment
Increased spending from engaged customers	↓ 13%
Reduced level of disengaged customers	↓ 13%
Avoided cost of previous email service provider	↓ 6%
Eliminated cost of internal recommendation engine	↓ 6%

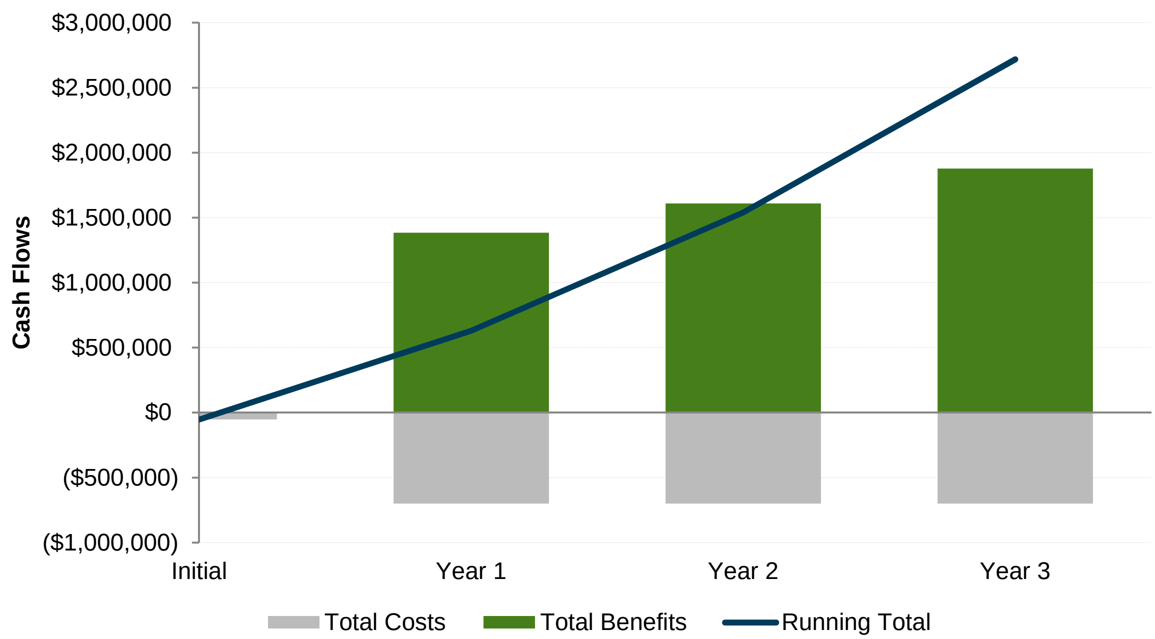
Costs	Adjustment
Enterprise subscription for Sailthru	↑ 6%

Source: Forrester Research, Inc.

Financial Summary

The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the organization's investment in Sailthru. Table 9 below shows the risk-adjusted ROI, NPV, and payback period values. These values are determined by applying the risk-adjustment values from Table 8 in the Risks section to the unadjusted results in each relevant cost and benefit section.

FIGURE 3
Cash Flow Chart (Risk-Adjusted)



Source: Forrester Research, Inc.

TABLE 9
Cash Flow: Risk-Adjusted

	Initial	Year 1	Year 2	Year 3	Total	Present value
Costs	($52,800)	($700,000)	($700,000)	($700,000)	($2,152,800)	($1,793,596)
Benefits	$0	$1,383,556	$1,609,136	$1,878,266	$4,870,959	$3,998,813
Net benefits	($52,800)	$683,556	$909,136	$1,178,266	$2,718,159	$2,205,216
ROI						123%
Payback period						0.9 months

Source: Forrester Research, Inc.

Sailthru: Overview

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

Sailthru is the only consumer interest-based automated personalization platform. Its modern marketing technology enables ecommerce brands to engage with individual users across all channels in connected, continuous experiences.

Leading marketing organizations see Sailthru as the intersection of big data and smart marketing. With Sailthru, marketers easily connect their entire ecosystem to build true 360-degree user profiles that combine behavioral and interest data from email, on-site, mobile, social, and offline engagements. That data drives automated, 1:1 personalized experiences. Add in first-class analytics and true real-time reporting, and this data only gets better and more sophisticated over time (and that means smarter marketing).

The resulting relationships that Sailthru clients build with their audiences are more valuable, efficient, and longer-term than ever before. Regardless of whether you're seeking a complete omnichannel solution or to personalize a specific channel, working with Sailthru will allow you to build the insights you need to maximize your user experience, optimize acquisition, and transform retention.

THE SAILTHRU DIFFERENCE

- An industry-first combination of explicit and implicit user behavioral and interest data.
- Natively build for big data scale, giving you a true single customer view based on each and every consumer's long-term behavior and interests.
- Purpose-built for omnichannel, not just for email.
- Individual-level reporting and analysis, including device recognition, for real-time analysis and longitudinal studies.
- Dedicated account management and support.

With more than 400 customers, including commerce and media leaders such as Business Insider, Fab, The Economist, Alex and Ani, and others, Sailthru is powering personal connections between brands and more than 785 million consumers worldwide, every day.

Appendix A: Total Economic Impact™ Overview

Total Economic Impact is a methodology developed by Forrester Research that enhances an organization'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.

The TEI methodology consists of four components to evaluate investment value: benefits, costs, flexibility, and risks.

BENEFITS

Benefits represent the value delivered to the user organization — IT and/or business units — by the proposed product or project. Often, product or project justification exercises focus just on IT cost and cost reduction, leaving little room to analyze the effect of the technology on the entire organization. The TEI methodology and the resulting financial model place 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. Calculation of benefit estimates involves a clear dialogue with the user organization to understand the specific value that is created. In addition, Forrester also requires that there be a clear line of accountability established between the measurement and justification of benefit estimates after the project has been completed. This ensures that benefit estimates tie back directly to the bottom line.

COSTS

Costs represent the investment necessary to capture the value, or benefits, of the proposed project. IT or the business units may incur costs in the form of fully burdened labor, subcontractors, or materials. Costs consider all the investments and expenses necessary to deliver the proposed value. In addition, the cost category within TEI captures any incremental costs over the existing environment for ongoing costs associated with the solution. All costs must be tied to the benefits that are created.

FLEXIBILITY

Within the TEI methodology, direct benefits represent one part of the investment value. While direct benefits can typically be the primary way to justify a project, Forrester believes that organizations should be able to measure the strategic value of an investment. Flexibility represents the value that can be obtained for some future additional investment building on top of the initial investment already made. For instance, an investment in an enterprisewide upgrade of an office productivity suite can potentially increase standardization (to increase efficiency) and reduce licensing costs. However, an embedded collaboration feature may translate to greater worker productivity if activated. The collaboration can only be used with additional investment in training at some future point. However, having the ability to capture that benefit has a PV that can be estimated. The flexibility component of TEI captures that value.

RISKS

Risks measure the uncertainty of benefit and cost estimates contained within the investment. Uncertainty is measured in two ways: 1) the likelihood that the cost and benefit estimates will meet the original projections and 2) the likelihood that the estimates will be measured and tracked over time. TEI applies a probability density function known as "triangular distribution" to the values entered. At a minimum, three values are calculated to estimate the underlying range around each cost and benefit.

Appendix B: Glossary

Discount rate: The interest rate used in cash flow analysis to take into account the time value of money. Companies set their own discount rate based on their business and investment environment. Forrester assumes a yearly discount rate of 10% for this analysis. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult their respective organizations to determine the most appropriate discount rate to use in their own environment.

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.

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.

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.

Return on investment (ROI): A measure of a project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits minus costs) by costs.

A NOTE ON CASH FLOW TABLES

The following is a note on the cash flow tables used in this study (see the example table below). The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1. Those costs are not discounted. All other cash flows in years 1 through 3 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 are not calculated until the summary tables are the sum of the initial investment and the discounted cash flows in each year.

TABLE [EXAMPLE]
Example Table

Ref.	Metric	Calculation	Year 1	Year 2	Year 3

Source: Forrester Research, Inc.