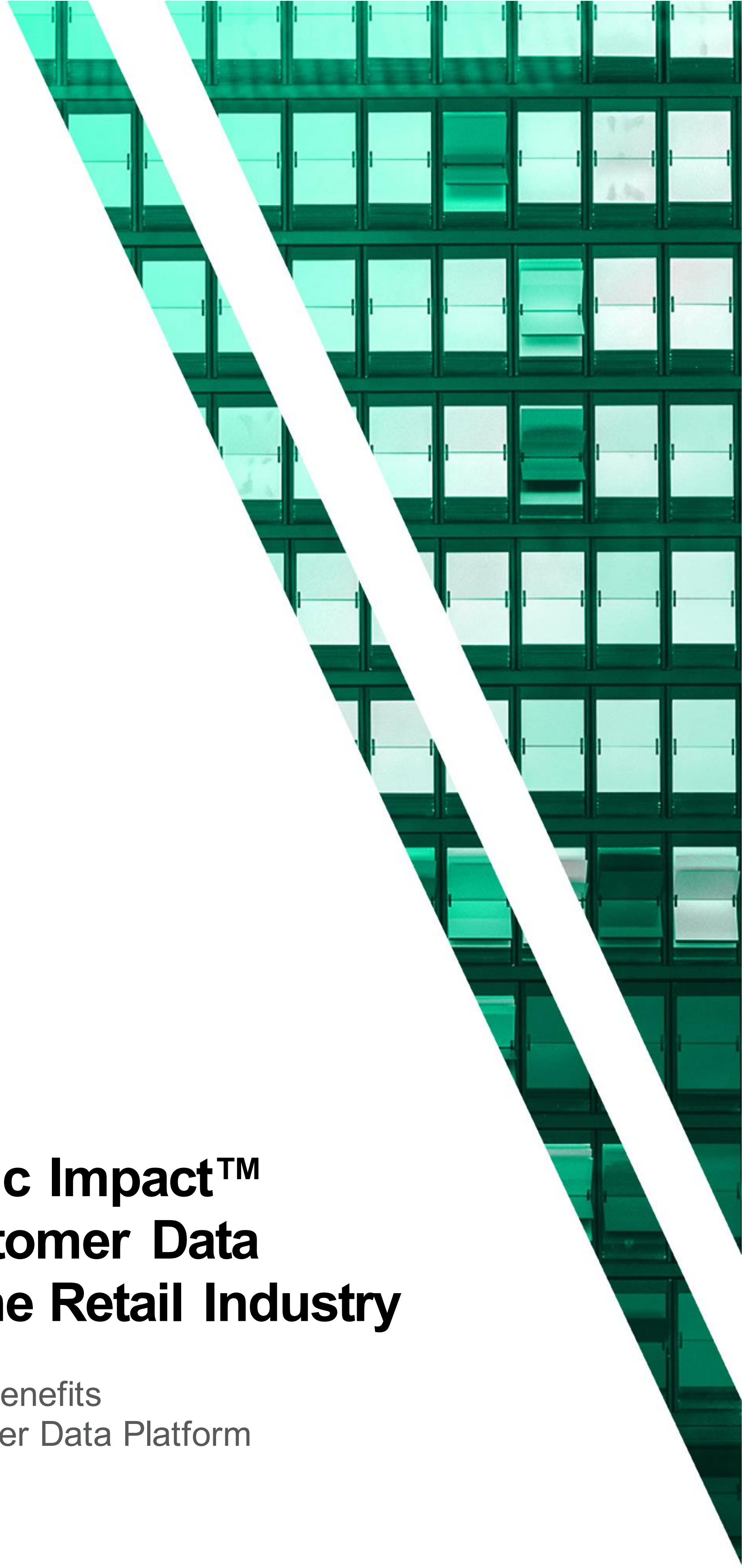
FORRESTER®



The Total Economic Impact™ Of Segment's Customer Data Platform Within The Retail Industry

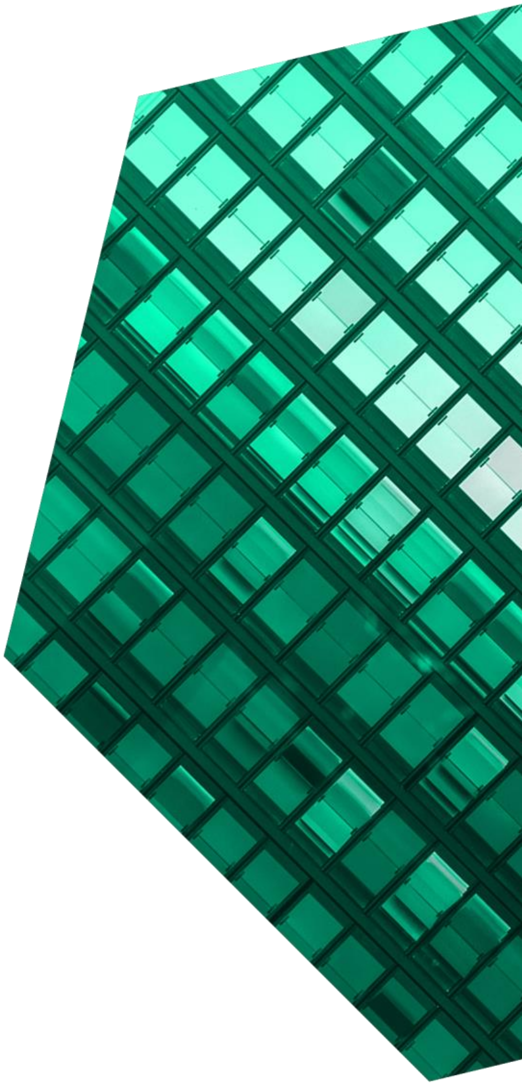
Cost Savings And Business Benefits
Enabled By Segment Customer Data Platform

AUGUST 2021

A FORRESTER TOTAL ECONOMIC IMPACT™ STUDY COMMISSIONED BY SEGMENT

Table Of Contents

Consulting Team: Lauren Hofmann
Jennifer Adams



ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. For more information, visit forrester.com/consulting.

Executive Summary

Understanding customer behavior across various channels and devices continues to be a challenge for organizations. Adopting a customer data platform allows organizations to centralize enterprise and customer-level data to yield more compelling customer engagement strategies. Segment Customer Data Platform provides a single view of customers across channels, platforms, and touchpoints, which powers personalized customer outreach and informs meaningful engagement strategies.

Segment Customer Data Platform (CDP) provides the data foundation and APIs that allow organizations to more easily ingest, clean, and manage their customer data. These strengthened data management capabilities prove to be transformational in key functional areas such as marketing, product, data engineering, data science, analytics, and BI. With Segment CDP, marketing teams develop more personalized outreach campaigns and gain incremental profit through optimized ad targeting; product teams gain a single view of their customer; and data engineering teams curtail time spent on historically laborious data management activities.

Segment commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Segment CDP.[1] The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Segment CDP on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five decision-makers at organizations with experience using Segment CDP. For the purposes of this study, Forrester aggregated the experiences of the interviewed organizations and combined the results into a single composite organization.

Prior to using Segment CDP, none of the interviewed organizations had a customer data platform in place.

KEY STATISTICS

Return on investment (ROI)
198%

Net present value (NPV)
$2.31M

Most organizations developed, in-house, an array of discrete solutions to solve for the multitude of challenges Segment CDP addresses in aggregate. Those that didn't develop their own solutions used a single enterprisewide database to store customer data.

However, prior attempts to manage customer data and refine customer engagement strategies proved unsuccessful, leaving organizations with duplicative, conflicting, or incomplete customer profiles. These limitations bred data distrust and prevented the organizations from establishing a clear, unified view of their customers' identities and behaviors.

Through their investment in Segment CDP, the organizations addressed many of the challenges they faced including having the ability to store customer data in a single location; scaling system capacity for data and connectivity needs; streamlining ongoing data management; and leveraging segmentation and personalization capabilities in customer communications.

The investment helped organizations generate incremental profit from personalized customer communications; gain incremental profit through optimized ad targeting; realize savings via enhanced data management efficiencies; and experience savings through decommissioning legacy solutions.

KEY FINDINGS

Quantified benefits. Risk-adjusted present value (PV) quantified benefits include:

- **Fifty percent improvement in email click-through rates and 10% boost in average order value through Segment personalization.** Segment CDP's ability to unify many different data sources in one location and integrate data points about a customer into a single profile elevates an organization's confidence in its customer data. With greater trust in their customer data, organizations can mature their segmentation and personalization strategies. Unsurprisingly, customers respond more favorably to individualized messaging, generating $900,779 in incremental profit for the organization attained over a three-year period.

$5,530,305

in incremental revenue generated at the end of Year 3

- **Incremental profit of $543,273 gained through optimized ad targeting.** The ability to create custom audiences with the click of a button makes the process of ad targeting easy. Additionally, Segment CDP allows organizations to isolate ad renderings to only be visible to potential customers, resulting in more efficient ad spend.

$9,680,000

in incremental revenue generated at the end of Year 3

- **Thirty-five percentage point reduction in data engineers' time spent on data management activities.** Leveraging Segment CDP to ingest, normalize, and distribute large quantities of data alleviates the burden of otherwise time-consuming and manually intensive daily work for data engineering teams. Greater automation through Segment CDP frees data engineering team members to spend time on higher-value activities across the organization. Organizations experienced a 40% reduction in human resources needed to manage data in the Segment environment. This efficiency gain translates to $1,090,912 in cost savings over a three-year period.

- **Cost savings of $943,873 over three years from decommissioning legacy solutions.** Whether an organization is sunsetting a single, enterprise-wide database or a number of in-house, custom-built solutions, many organizations realize cost savings through sunsetting legacy technologies.

Unquantified benefits. Benefits that are not quantified for this study include:

- **Increased organizational confidence in data integrity.** With Segment, organizations experience significantly increased confidence in the accuracy, completeness, and consistency of their data.

- **Strengthened compliance, privacy, and account security.** Segment CDP provides essential, out-of-the-box compliance features that make adherence to General Data Protection Regulation (GDPR) and California Consumer

Privacy Act (CCPA) requirements more manageable. Segment CDP's detailed tracking of user actions — even those made anonymously — helps support critical security and privacy efforts.

- **Enhanced organizational agility.** Segment CDP's ability to scale to meet an organization's unique needs helps businesses stay viable during periods of rapid change and uncertainty.
- **Increased speed of data ingestion.** Rapidly bringing in large volumes of data helps reduce time to delivering actionable customer insights.
- **Reliable customer support.** Quick turnaround times and proactive, consultative outreach define Segment's customer support.

Costs. Risk-adjusted PV costs include:

- **Implementation costs of $1,019,977.** This includes licensing costs and use of supplemental support and services either by Segment Professional Services team or via a third-party firm.
- **Ongoing maintenance costs of $145,869.** These costs reflect both data engineering and marketing/analytics tasks.

The customer interviews and financial analysis found that a composite organization experiences benefits of $3.48 million over three years versus costs of $1.17 million, adding up to a net present value (NPV) of $2.31 million and an ROI of 198%.

> **"Without Segment, we couldn't do anything that we do today. It's foundational. It'd be like asking someone 'Is it worth having plumbing at your house?'"**
>
> — Chief digital officer, office retail

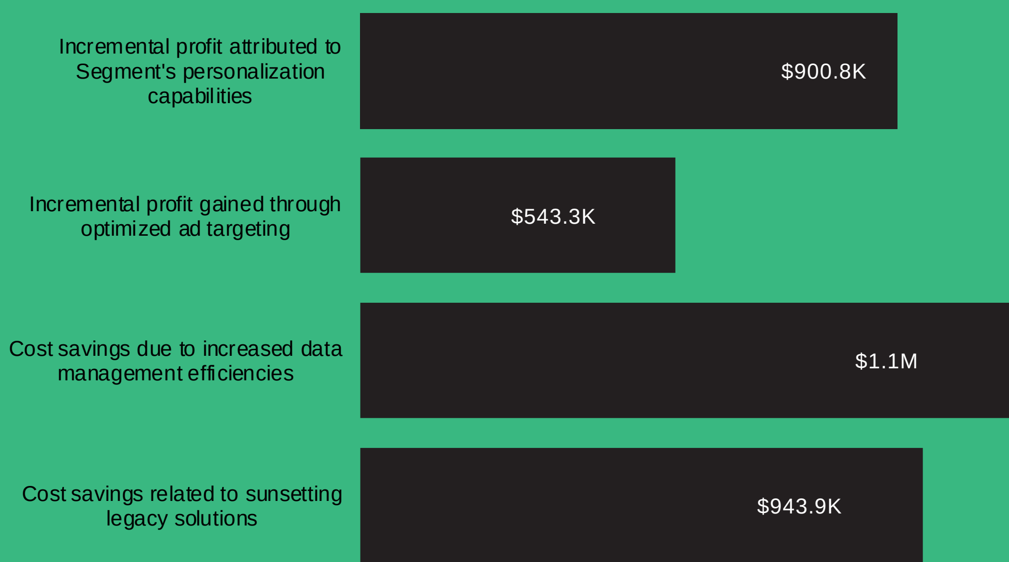
ROI
198%

BENEFITS PV
$3.48M

NPV
$2.31M

PAYBACK
<6 months

Benefits (Three-Year)



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 Segment Customer Data Platform (CDP).

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 Segment CDP can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Segment 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 Segment Customer Data Platform.

Segment 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.

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

DUE DILIGENCE

Interviewed Segment stakeholders and Forrester analysts to gather data relative to Segment CDP.

CUSTOMER INTERVIEWS

Interviewed five decision-makers at organizations using Segment CDP to obtain data with respect to costs, benefits, and risks.

COMPOSITE ORGANIZATION

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

FINANCIAL MODEL FRAMEWORK

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

CASE STUDY

Employed four fundamental elements of TEI in modeling 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 Segment Customer Data Platform Customer Journey

Drivers leading to the Customer Data Platform investment

Interviewed Organizations				
Industry	**Region**	**Interviewee**	**Revenue**	**Employees**
Consumer electronics and appliances	Headquartered in North America	Head of growth	$265 million	140
Beauty and cosmetics	Headquartered in North America	Senior product manager	$500 million	360
Musical instrument manufacturer and retailer	Headquartered in North America	Chief digital officer	$600 million	1,438
Office retail	Headquartered in North America	Chief digital officer	$2.57 billion	14,000
Apparel	Headquartered in Europe	Data scientist	$200 million	90

KEY CHALLENGES

Prior to investing in Segment Customer Data Platform, creating a holistic view of the customer was a struggle for the interviewed organizations. Common challenges included:

- **Creating a single location to store customer data.** Fragmented storage of customer data created access difficulties for actionable and timely insights about customers. This fragmentation impacted marketing, sales, and customer success teams and resulted in a lost opportunity to drive specific product recommendations and targeted messaging through personalization and segmentation capabilities.

- **Lack of system capacity for data volume and connectivity needs.** Existing solutions were unable to handle increasing demands for greater data ingestion volume and speed. The need for greater data ingestion paralleled the need for downstream data use through a variety of destination applications that facilitate closer customer connection.

- **Resource inefficiencies due to degree of manual work required.** The lack of a single location to store customer data led to heavy manual efforts to perform common tasks such as: ingesting new data sources; performing extract, transform, and load (ETL) on data sets; establishing connectivity to destination applications; monitoring data; and managing data.

> **"We were so heavily focused on ETLs and getting random data points for the sales and marketing teams, whenever it was requested of us…. Now, we spend our time on actual services internally that are needed to support really big initiatives on the website or overall customer experience."**
>
> *— Senior product manager, beauty and cosmetics*

- **Lack of segmentation and personalization capabilities.** A senior product manager expressed: "[Before Segment], we were in the infancy stages of segmentation. We didn't have a really good handle on who our audience was." In their prior state, the organizations struggled to activate segmentation and personalization capabilities, resulting in more generalized marketing and advertising campaigns and subsequently less engagement by existing and prospective customers.

> **"Email has to be personalized; it accounts for almost 80% of our revenue."**
>
> *— Senior product manager, beauty and cosmetics*

SOLUTION REQUIREMENTS

The interviewed organizations searched for a solution that could:

- Ingest and join data across many disparate sources.
- Push centralized data to various destinations via establishing connections between the data warehouse and end user applications.
- Create a unified customer profile with rich insights acquired from data sources (e.g., propensity to buy, behaviors based on online activities).
- Flexibly scale with the organization.
- Establish privacy and compliance protocols.

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 companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

Description of composite. Retail business, at least $1 billion in revenue, with hybrid operations — both e-commerce and traditional, brick-and-mortar.

The organization has a well-developed brand identity both offline and online with a predominant business-to-consumer (B2C) focus. While headquartered in North America, the operational footprint is often global and employee range is 10-15k. The average order value (AOV) for a customer is $110.

Key assumptions

- **Revenue: $1 billion**
- **Customer focus: B2C**
- **HQ: North America**
- **Industry: Retail/e-commerce**
- **AOV: $110**

Deployment characteristics. The composite organization replaces its legacy infrastructure — either a mix of in-house, custom-built solutions or an enterprisewide database (depending on the organization's size) — with Segment CDP. It leverages Segment CDP to:

- Create a single, holistic view of the customer, breaking through data silos.
- Establish customer personas for segmentation and personalization purposes in marketing and advertising campaigns.

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	Incremental profit attributed to Segment's personalization capabilities	$235,224	$378,711	$497,728	$1,111,663	$900,779
Btr	Incremental profit gained through optimized ad targeting	$115,200	$213,840	$348,480	$677,520	$543,273
Ctr	Cost savings due to increased data management efficiencies	$438,672	$438,672	$438,672	$1,316,016	$1,090,912
Dtr	Cost savings related to sunsetting legacy solutions	$335,040	$382,560	$430,080	$1,147,680	$943,873
	Total benefits (risk-adjusted)	$1,124,136	$1,413,783	$1,714,966	$4,252,885	$3,478,837

INCREMENTAL PROFIT ATTRIBUTED TO SEGMENT'S PERSONALIZATION CAPABILITIES

Evidence and data. All interviewed organizations expressed personalized outreach as being central to their email marketing campaigns.

Enhanced personalization, driven by detailed and actionable data points embedded within a customer profile, helps organizations make meaningful connections with the right customer at the right time.

Before Segment, interviewed organizations lacked a unified location for customer data. Given the reliance upon disparate data sources and systems, data duplication and discrepancies were common, as were incomplete views into a customer's stated needs and preferences. Because of these challenges, interviewed organizations were not able to fully employ segmentation and personalization within their outreach campaigns.

With Segment, interviewees report a holistic, singular view of the customer, which creates greater confidence in leveraging segmentation and personalization capabilities to deepen customer engagement.

The chief digital officer for a musical instrument manufacturer and retailer stated, "As a consequence of trusting our data, we can amplify how much we talk to our customer without fear of convoluting messages or otherwise making a bad customer experience." Through greater trust in the data that Segment CDP makes available to teams, organizations are empowered to reach out to customers more frequently and with greater specificity. This strengthened trust in the data led to greater success at all levels of the marketing funnel. The head of growth for a consumer electronics and appliances company shared: "What I notice is a higher customer lifetime value. A repeat order value is higher because of Segment. This is because we can reach out to these users again and again and keep them coming back".

> **"I can consistently get better open rates, better clicks, and better conversions by doing targeted messages. You can't do that without having your segments, and you can't do that without easily being able to create your segments. But now, it's like a click of a button to create segments. I don't need developers — I can do it myself."**
>
> *— Head of growth, consumer electronics and appliances*

Modeling and assumptions. Based on customer interviews, Forrester estimates the following for the composite organization:

- The number of emails sent annually indicates a 15% year-over-year (YoY) increase modeled but recognizes a point of saturation in email growth beyond Year 3.
- The percentage of emails personalized increases 40% from Year 1 to Year 2, but it increases only 15% from Year 2 to Year 3 given diminishing returns over time.
- The open rate for Segment personalized emails shows a flat 50% average improvement. Interviewed organizations reported higher results on individual campaigns.
- The click-through rate for Segment personalized emails shows a flat 50% average improvement. Interviewed organizations reported higher results on individual campaigns.
- The conversion rate with Segment personalized emails shows a flat 20% average improvement. Interviewed organizations reported higher results on individual campaigns.

Risks. This benefit can vary from organization to organization due to the following factors:

- Number of emails sent annually.
- Percent of emails personalized.
- Open rate.
- Click-through rate.
- Conversion rate.
- Average order value.
- Increase in average order value.
- Revenue margin.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of more than $900,000.

> **"Segment CDP lets us have richer interactions over time as we've gotten a better handle on how people are using our products. We've been able to adjust to make sure we are speaking to one customer across multiple avenues."**
>
> *— Chief digital officer, musical instrument manufacturer and retailer*

Incremental Profit Attributed To Segment's Personalization Capabilities

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
A1	Number of emails sent annually	Composite	800,000,000	920,000,000	1,058,000,000
A2	Percent of emails personalized	Interviews	15%	21%	24%
A3	Number of personalized emails sent	A1*A2	120,000,000	193,200,000	253,920,000
A4	Email open rate pre-Segment	Benchmark	10%	10%	10%
A5	Email open rate with Segment	Interviews	15%	15%	15%
A6	Email click-through rate pre-Segment	Benchmark	2%	2%	2%
A7	Email click-through rate with Segment	Interviews	3%	3%	3%
A8	Conversion rate pre-Segment	Benchmark	1.2%	1.2%	1.2%
A9	Conversion rate with Segment	Interviews	1.4%	1.4%	1.4%
A10	Purchases before Segment	A3*A6*A8	28,800	46,368	60,941
A11	Purchases with Segment	A3*A7*A9	50,400	81,144	106,646
A12	Additional purchases with Segment	A11-A10	21,600	34,776	45,705
A13	Average order value	Benchmark	$110	$110	$110
A14	Increase in average order value	Interviews	10%	10%	10%
A15	Incremental revenue attributed to Segment personalized emails	A12*A13*(1+A14)	$2,613,600	$4,207,896	$5,530,305
A16	Operating margin	Benchmark	10%	10%	10%
At	Incremental profit attributed to Segment's personalization capabilities	A15*A16	$261,360	$420,790	$553,031
	Risk adjustment	↓10%			
Atr	Incremental profit attributed to Segment's personalization capabilities (risk-adjusted)		$235,224	$378,711	$497,728
	Three-year total: $1,111,663		**Three-year present value: $900,779**		

INCREMENTAL PROFIT GAINED THROUGH OPTIMIZED AD TARGETING

Evidence and data. Constructing detailed customer profiles and targeted ad audiences based on historical purchase data, customers' expressed preferences, and tracked behavioral patterns online is integral to a successful paid advertising strategy. Segment CDP provides organizations with the necessary tools to ingest, clean, and manage the customer data that is fed into customer profiles and subsequently, developing targeted audiences.

Before Segment, interviewed organizations struggled to gain a complete picture of their customers based on personal preferences and behavioral patterns, making strategic audience-building and ad targeting infeasible.

With Segment, digesting customer preferences and behavioral patterns across a multitude channels and devices is an easier feat. Organizations can create custom audiences for use in targeted campaigns across a variety of paid media advertising platforms.

> **"We've been able to do much more targeting and segmentation around what customer behaviors happen online broadly versus only seeing what's happening through transaction data."**
>
> *— Data scientist, apparel*

A data scientist in the apparel industry said: "Historically, if we were to go out and run a Facebook lead campaign, we would ultimately engage people — nearly 70% — that are already our customers. Segment CDP enables us to create an exclusion list that automatically updates to suppress people that already subscribe to our campaigns. With Segment, that number has dropped from 70% to less than 20%." In essence, Segment CDP's segmentation and targeting capabilities allow organizations to do more with less advertising spend.

Modeling and assumptions. Based on customer interviews, Forrester estimates the following for the composite organization:

- Annual marketing budget assumes 10% YoY growth.
- Paid media budget as a percentage of total marketing budget assumes a modest 10% YoY growth given customers' increased digital exposure.
- Return on ad spend (ROAS) without Segment CDP assumes a conservative industry benchmark of $2.87.
- Annual increase in ROAS with Segment CDP escalates from 20% in Year 1 to 40% at the end of Year 3.
- Forty percent of the improvement in ROAS is attributed specifically to Segment CDP. One interviewee attributed the remaining 60% to enhanced creative, ad tagging, and an overarching brand refresh
- The primary test case for measuring ROAS was through Facebook Advertising.

Risks. This benefit can vary from organization to organization due to the following factors:

- ROAS will vary by platform (e.g., Google Paid Search, Facebook Advertising, Instagram Advertising, etc.) in addition to organization and industry.
- Attribution of ROAS improvement to Segment CDP is tricky to isolate given a multitude of factors at play when measuring the impact of an ad (e.g., improvements in creative, relaunch of a brand, refining ad tags, etc.).
- Annual marketing budget and percent spent on paid media will vary by industry and organization.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of more than $543,000.

Incremental Profit Gained Through Optimized Ad Targeting					
Ref.	**Metric**	**Calculation**	**Year 1**	**Year 2**	**Year 3**
B1	Annual marketing budget	Composite	$100,000,000	$110,000,000	$121,000,000
B2	Paid media budget as a percentage of total marketing budget	Interviews	16%	18%	20%
B3	Annual paid media budget	B1*B2	$16,000,000	$19,800,000	$24,200,000
B4	ROAS without Segment CDP	Benchmark	$2.87	$2.87	$2.87
B5	Increase in ROAS with Segment CDP	Interviews	20%	30%	40%
B6	ROAS with Segment CDP	Interviews	$3.07	$3.17	$3.27
B7	Incremental revenue generated through ROAS improvement with Segment CDP	B3*(B6-B4)	$3,200,000	$5,940,000	$9,680,000
B8	Attribution to Segment CDP	Interviews	40%	40%	40%
B9	Operating margin	Assumption	10%	10%	10%
Bt	Incremental profit gained through optimized ad targeting	B7*B8*B9	$128,000	$237,600	$387,200
	Risk adjustment	↓10%			
Btr	Incremental profit gained through optimized ad targeting (risk-adjusted)		$115,200	$213,840	$348,480
	Three-year total: $677,520		**Three-year present value: $543,273**		

COST SAVINGS DUE TO INCREASED DATA MANAGEMENT EFFICIENCIES

Evidence and data. The head of growth for a consumer electronics and appliances organization best described the data processing and management transformation that Segment CDP offers: "We had to go from chaos to order, and Segment CDP helped us do that. Segment just feeds us really clean, easy-to-use data into tools that make us money." The efficiencies achieved through Segment allow for overall optimization of organizational spend via reallocating higher-cost resources to higher-value activities, while simultaneously allowing organizations to invest in more meaningful initiatives within R&D and customer experience, for instance. As the chief digital officer for a musical instrument manufacturer and retailer said: "We are not spending money cleaning up data in Segment. Now, I'm spending money on new product development".

> **"[Segment CDP] is a fundamental part of our infrastructure. Segment is something [data engineers] take for granted, which is exactly the way it should be."**
>
> *— Chief digital officer, musical instrument manufacturer and retailer*

Before Segment, data management activities were labor- and resource-intensive due to a heavy manual lift for common tasks, including ingesting new data sources; performing ETL; establishing connectivity to destination applications; monitoring data; and managing data.

With Segment, data engineers are able to spend significantly less time on historically labor-intensive data processing and management tasks — so much so that a senior product manager for a beauty and cosmetics company commented: "A couple of the [data engineering] team members have completely switched teams because we don't need them any longer, so they're doing other things that are more exciting. Also, I think the ability for the business teams to bypass engineering to get key data has been really helpful. The number of tickets in my backlog has decreased significantly."

Percentage point reduction in time spent on data ingestion and data management activities with Segment CDP

35%

Modeling and assumptions. Based on customer interviews, Forrester estimates that the fully burdened annual salary for a full-time data engineer at the composite organization is $124,750.

Risks. This benefit can vary from organization to organization due to the following factors:

- Variance of FTE compensation across geographies and organizations.
- Number of data engineers utilized for data ingestion, ETL, and management activities.
- Amount of time spent per week both with and without Segment given internal organizational processes.

Results. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of nearly $1.1 million.

Cost Savings Due To Increased Data Management Efficiencies						
Ref.	**Metric**	**Calculation**	**Initial**	**Year 1**	**Year 2**	**Year 3**
C1	Data engineer FTE fully burdened hourly rate	$92,407*1.35/2,080		$60	$60	$60
C2	Number of data engineers before Segment CDP	Interviews		10	10	10
C3	Percentage of time data engineers spend on ETL and management before Segment CDP	Interviews		40%	40%	40%
C4	Number of hours spent per week before Segment CDP	C3*40		16	16	16
C5	Subtotal: weekly spend before Segment	C1*C2*C4		$9,600	$9,600	$9,600
C6	Number of data engineers after Segment CDP	Interviews		6	6	6
C7	Percentage of time data engineers spend on ETL and management after Segment CDP	Interviews		5%	5%	5%
C8	Number of hours spent per week after Segment CDP	C7*40		2	2	2
C9	Subtotal: weekly spend with Segment	C1*C6*C8		$720	$720	$720
Ct	Cost savings due to increased data management efficiencies	(C5-C9)*52	$0	$461,760	$461,760	$461,760
	Risk adjustment	↓5%				
Ctr	Cost savings due to increased data management efficiencies (risk-adjusted)		$0	$438,672	$438,672	$438,672
	Three-year total: $1,316,016		**Three-year present value: $1,090,912**			

COST SAVINGS RELATED TO SUNSETTING LEGACY SOLUTIONS

Evidence and data. A few interviewees reported that they experienced cost savings through the gradual decommissioning of their legacy data systems whose capabilities were either redundant with or inferior to Segment CDP's. In the case of one interviewed organization that recently acquired another company, the technical consolidation between both entities offered through Segment CDP brought forth not only cost savings but also greater organizational cohesiveness.

Before Segment, interviewed organizations utilized a variety of custom, in-house-built solutions or a single enterprisewide database to ingest new data sources; perform ETL; establish connectivity to downstream internal user applications; monitor data; and manage data.

With Segment, all costs associated with maintaining legacy solutions, such as licensing, third-party fees, and internal labor efforts, were eliminated over a three-year timespan. Eliminating technical redundancies allowed the interviewed organizations to more efficiently reallocate resources. An additional unquantified benefit associated with sunsetting legacy systems is minimizing other teams' efforts interfacing with those solutions — e.g., marketing, product management, analytics, and engineering.

Modeling and assumptions. Based on customer interviews, Forrester estimates the following for the composite organization:

- The previous solution cost $300,000 annually, including licensing, maintenance, and third-party services.
- The reduction of time and labor required to maintain legacy infrastructure decreased by 25% YoY.

Risks. While some interviewed organizations experienced this benefit, customer data platforms are neither positioned nor intended to be full replacements for existing technologies. Some organizations may not experience cost savings related to sunsetting legacy solutions. In addition, the following will vary greatly by organization:

- Licensing costs associated with legacy solutions.
- Timeline to sunset legacy solutions.
- Amount of effort needed to maintain legacy solutions.
- Types of human resources deployed to manage the sunsetting process.
- Costs associated with staffing.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of nearly $944,000.

Cost Savings Related to Sunsetting Legacy Solutions

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
D1	Legacy customer data infrastructure costs	Interviews		$300,000	$300,000	$300,000
D2	IT administrator efforts to maintain legacy data infrastructure	Composite		2	2	2
D3	IT administrator FTE fully burdened annual salary	$88,000*1.35		$118,800	$118,800	$118,800
D4	Total labor to maintain legacy data infrastructure	D2*D3		$237,600	$237,600	$237,600
D5	Gradual reduction in labor maintaining legacy infrastructure	Assumption		50%	75%	100%
D6	Labor savings from reduction in maintaining legacy infrastructure	D4*D5		$118,800	$178,200	$237,600
Dt	Cost savings related to sunsetting legacy solutions	D1+D6	$0	$418,800	$478,200	$537,600
	Risk adjustment	↓20%				
Dtr	Cost savings related to sunsetting legacy solutions (risk-adjusted)		$0	$335,040	$382,560	$430,080
	Three-year total: $1,147,680			**Three-year present value: $943,873**		

UNQUANTIFIED BENEFITS

Additional benefits that organizations experienced but were not able to quantify include:

- **Increased confidence in data integrity.** Identifying a single source of truth for customer data was a longstanding pain point for interviewed organizations before implementing Segment. With Segment, organizations experience significantly increased confidence in the accuracy, completeness, and consistency of their data. The chief digital officer for an office retailer stated: “There’s one source of truth now. There’s a lot of alerting and controls to ensure the data doesn’t become compromised or exist in a state that it requires its reconciliation. Our data quality is many, many times better than before Segment." Additionally, the chief digital officer for a musical instrument manufacturer and retailer conveyed a similar experience: "I ran sites without a Segment-type infrastructure, and we never had the ability to increase value for a user through our products because we didn't actually know who the user was, or we had multiple definitions of what a user was. Segment eliminated that from having to be a concern, having to invent that."

- **Strengthened compliance, privacy, and account security.** Given the volume and multitude of sources of data ingested at the organizational level, proper oversight and control over data is critical. All interviewees detailed how they rely upon Segment CDP to provide essential account security, privacy, and compliance functionalities.

  While the use cases for each organization are different, a common theme in privacy and compliance needs involves leveraging Segment's out-of-the-box compliance features to more easily facilitate General Data Protection Regulation (GDPR) and California Consumer Privacy Act (CCPA) compliance by deleting customer data within Segment.

  With respect to privacy protocols, the chief digital officer in the office retail industry shared: "We have minimized access into Segment and our data warehouse, and that allows us to control the amount of personal identifying information that is being pushed to destinations. In the old models you have a lot of analysts who could write queries and access any table. We've created the ability to use anonymized customer IDs to push information about the customer into a system, and then that system can use Segment to access the data it needs — or choose not to push any data at all."

  One interviewee shared how their organization is beginning to leverage Segment for account security. The head of growth at the consumer electronics and appliances company detailed: "Every time we log a clickstream event, we also log IP addresses. Since Segment can create a profile even for an anonymous user, it helps us quickly spot a trail of someone on our site who might be attempting a cyberattack."

- **Enhanced organizational agility.** Interviewees provided diverse accounts of how Segment CDP has helped their organization meet their ever-changing needs. For instance, a chief digital officer in office retail noted how Segment has helped them adjust to the new realities brought on by the COVID-19 global pandemic: "We've done very well in B2B during COVID, and a lot of that success is due to the transition from an account-based model to an algorithmic approach to our go-to-market strategy, which is 100% powered by Segment." They also noted that Segment helped their organization marry the brick-and-mortar retail and e-commerce worlds: "Segment really allows us to achieve one view of a customer between the retail and digital space, which was very difficult before. For instance, Segment pulls in transaction-level data from the retail store or other traditional businesses we have and joins that with the digital clickstream data and marketing events, so we can get a full, 360-degree view of the customer."

- **Elevated speed of data ingestion.** "We're collecting as much data in two weeks now through Segment than we would have in a full year on the old platform", said the chief digital officer for an office retail company. Every interviewee echoed this sentiment.

- **Reliable customer support.** One interviewee, the head of growth at a consumer electronics and appliances company highlighted: "They (Segment) provide resources for customers

> quickly and initiate routine check-ins and business reviews. That is essential. Without that, I guarantee we would be frustrated…. Segment does a pretty darn good job at customer support, and I think it's critical for a tool like this."

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement Segment CDP and later realize additional uses and business opportunities.

A common thread across all interviewed organizations is the belief that the investment in Segment CDP allows them to fully realize the potential of one of their company's greatest assets — their data. A chief digital officer in the retail industry shared: "A key benefit of Segment is we now have a data layer that is all-encompassing across the business. We have a 360-degree view of the customer and a 360-degree view of the business. It allows us to make informed decisions very quickly and in a very agile manner."

Ease of customization, in reference to data acquisition and storage capabilities as well as the use of the data itself, is crucial for an organization's future evolution. A data scientist for an apparel company remarked: "You can go in and easily code and build on top of the Segment platform to customize it for whatever sources and destinations that aren't there. We can extend the platform to our liking without extending the infrastructure."

This ease-of-use positions Segment CDP as a complement to an organization's existing or future tech stack. The chief digital officer for a musical instrument manufacturer and retailer stated: "We didn't want to back ourselves into a corner that we had to engineer out of later on. Historically, when we had to build an infrastructure for our data, that took up 90% of the time. It's time we weren't spending on building products for customers. With Segment, I'm not building a system for data now."

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	Implementation, licensing, and support/services	$90,000	$300,000	$372,000	$465,600	$1,227,600	$1,019,977
Ftr	Ongoing labor costs	$0	$58,656	$58,656	$58,656	$175,968	$145,869
	Total costs (risk-adjusted)	$90,000	$358,656	$430,656	$524,256	$1,403,568	$1,165,846

IMPLEMENTATION, LICENSING, AND SUPPORT/SERVICES

Evidence and data. Interviewed organizations reported that the internal staffing and resource requirements to plan for and implement Segment CDP were minimal. The average across organizations was two data engineer FTEs engaged — one resource 100% of the time, another 50% of the time — over a three-month period. The chief digital officer for an office retail company shared: "It's pretty intuitive. If you have a background in data, it's very, very easy to use. It will take three months to go live, and we used the Segment Professional Services team alongside our own data engineering team to start implementing [Segment CDP]. It was a very basic implementation."

Only one of five interviewed organizations hired a third-party consultant to manage the implementation. The majority of interviewees indicated that they utilized Segment's solutions architect throughout the implementation period and occasionally engaged Segment's Professional Services team for additional consultation. A senior product manager in the beauty and cosmetics industry said: "We did rely on a solutions architect from Segment at first, about six weeks after signing the contact, just getting everything caught up and understanding the ins and outs of what we could or couldn't do with Segment CDP."

While no organizations acknowledged any formal change management costs during the Segment CDP implementation, it is reasonable to assume that a company may incur change management costs depending on the degree of transformation taking place.

Similarly, with respect to companywide training efforts, interviewed organizations framed their orientation to Segment CDP as a socialization of the tool within individual business units versus offering an overarching training to teams. A senior product manager for a beauty and cosmetics company expressed: "I personally do a little training with the marketing or growth teams. There are a few different business units that are excited about [Segment CDP], so I show them what we've done so far and what they can do. We have a document written up about the opportunity areas we could be focusing on. From the engineering side, we have Confluence documents in place to provide self-service help when needed."

"Our teams become experts as well. We have had some people now using it for over two years, so they kind of become subject matter experts on [Segment CDP]", said the chief digital officer in the office retail space.

Modeling and assumptions. Based on customer interviews, Forrester estimates the following for the composite organization:

- The majority of interviewed organizations utilized Segment's supplemental support services both during implementation and post-implementation.
- The composite organization spends $50,000 per year in additional support and services from Segment to ensure it is maximizing the full potential of the platform. The composite averaged three engagements per year.
- Standard Segment training is embedded within the one-time implementation cost.
- While reflected under the "Initial" column, the $75,000 implementation costs are spread over a three year period

Risks. This benefit can vary from organization to organization due to the following factors:

- FTE compensation varies across geographies and organizations.
- Implementation costs will vary by individual organization.
- Licensing costs will vary as each customer's pricing is custom. Segment CDP customers can choose a pricing methodology that suits their individual needs based on the number of API calls, customer profiles managed, or data sources ingested.
- Supplemental support services via Segment's Professional Services team will vary.
- End-user training is not quantified in the model but may be a possible cost to bear.
- Change management costs are not quantified in the model but a possible cost to bear.
- Number of FTE resource involvement will vary.

Results. To account for these risks, Forrester adjusted this cost upward by 20%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $1 million.

Implementation, Licensing, And Support/Services

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
E1	Segment implementation costs	Interviews	$75,000			
E2	Segment licensing costs	Interviews		$200,000	$260,000	$338,000
E3	Supplemental support/services	3 engagements per year		$50,000	$50,000	$50,000
Et	Implementation, licensing, and support/services	E1+E2+E3	$75,000	$250,000	$310,000	$388,000
	Risk adjustment	↑20%				
Etr	Implementation, licensing, and support/services (risk-adjusted)		$90,000	$300,000	$372,000	$465,600
	Three-year total: $1,227,600		Three-year present value: $1,019,977			

ONGOING LABOR COSTS

Evidence and data. Ongoing labor to manage Segment CDP is minimal, especially when compared to interviewed organizations' prior environments. The chief digital officer for an office retail company shared: "The team is always going in, making tweaks, and adding destinations or sources, but from a maintenance perspective, it's pretty hands-off." Thus, the percentage of time data engineers spend on ongoing data ingestion and management related activities is substantially less than their pre-Segment scenario.

Similarly, ongoing labor costs to manage customer profiles, segmentation, and marketing analytics is nominal. The time spent within Segment CDP is also contingent on the other tools the team utilizes. A data scientist in the apparel industry commented, "Segment is an additional tool for them, not the main one, so they spend about 5% of their time in Segment."

Modeling and assumptions. Based on customer interviews, Forrester estimates that the composite organization will have both data engineers and marketing/analytics users interacting with Segment CDP on an ongoing basis.

Risks. This benefit can vary from organization to organization due to the following factors:

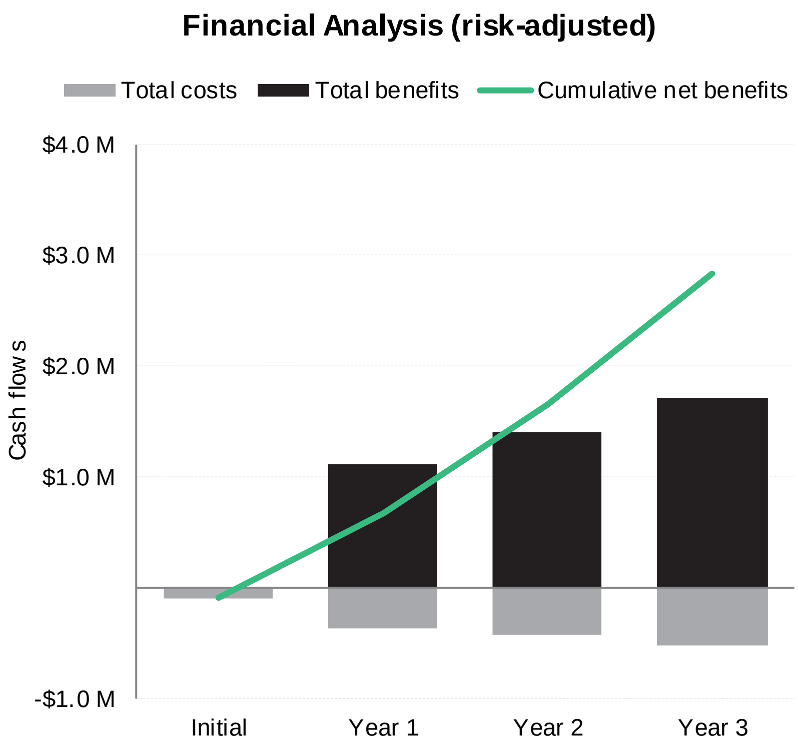
- FTE compensation varies across geographies and organizations.
- Human resource needs will vary by organization.
- Amount of time spent that data engineers or marketing/analytics resources who interact with Segment CDP will vary.

Results. To account for these risks, Forrester adjusted this cost upward by 20%, yielding a three-year, risk-adjusted total PV of less than $146,000

Ongoing Labor Costs

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
F1	Number of FTEs tasked with ongoing data management	Interviews		6	6	6
F2	Percent of time spent on ongoing data management	Composite		5%	5%	5%
F3	Number of hours spent weekly	F2*40		2	2	2
F4	Data engineer FTE fully burdened hourly rate	$92,407*1.35/2,080		$60	$60	$60
F5	Number of FTE managing customer profiles and segments (marketing, analytics roles)	Composite		2	2	2
F6	Percent of time spent on building customer profiles and segments	Composite		5%	5%	5%
F7	Number of hours spent weekly	306217		2	2	2
F8	Marketing/analytics FTE hourly rate	$84,000*1.35/2,080		$55	$55	$55
Ft	Annual ongoing labor costs	(F1*F3*F4)*52+ (F5*F7*F8)*52		$48,880	$48,880	$48,880
	Risk adjustment	↑20%				
Ftr	Annual ongoing labor costs (risk-adjusted)		$0	$58,656	$58,656	$58,656
	Three-year total: $175,968			**Three-year present value: $145,869**		

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS



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	($90,000)	($358,656)	($430,656)	($524,256)	($1,403,568)	($1,165,846)
Total benefits	$0	$1,124,136	$1,413,783	$1,714,966	$4,252,855	$3,478,837
Net benefits	($90,000)	$765,480	$983,127	$1,190,710	$2,849,317	$2,312,991
ROI						198%
Payback period (months)						<6

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] 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.


FORRESTER®