

A Forrester Total Economic Impact™  
Study Commissioned by Adobe  
December 2018

# The Total Economic Impact™ of Adobe Analytics & Adobe Audience Manager

Accelerating Time-To-Insight, Driving Digital Growth, and Enhancing the Customer Experience Using Adobe Analytics & Adobe Audience Manager

# Table of Contents

<b>Executive Summary</b>	<b>1</b>
Key Findings	2
TEI Framework And Methodology	4
<b>The Adobe Analytics &amp; Audience Manager Customer Journey</b>	<b>5</b>
Interviewed Organizations	5
Key Challenges	5
Solution Requirements	6
Key Results	6
Composite Organization	7
<b>Analysis of Benefits</b>	<b>8</b>
Profit Growth From Increased Site Traffic	8
Profit Growth From Increased Conversion Rate	10
Profit Growth From An Increase In Average Order Value	11
Profit Growth From More Effective Upselling	12
Media Efficiencies Reinvested In The Business	13
Marketing, Customer Insights, And IT Labor Savings	14
<b>Analysis of Costs</b>	<b>16</b>
Adobe Software Licensing Costs	16
Professional And Managed Service Costs	16
Internal Resource Costs	17
Training Costs	18
<b>Financial Summary</b>	<b>19</b>
<b>Adobe Analytics &amp; Adobe Audience Manager: Overview</b>	<b>20</b>
<b>Appendix A: Total Economic Impact</b>	<b>21</b>
<b>Appendix B: Endnotes</b>	<b>22</b>

**Project Director:**  
Adam Schlegel

## ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. Ranging in scope from a short strategy session to custom projects, Forrester's Consulting services connect you directly with research analysts who apply expert insight to your specific business challenges. For more information, visit [forrester.com/consulting](https://forrester.com/consulting).

© 2018, Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. For additional information, go to [forrester.com](https://forrester.com).

## Benefits And Costs



## Adobe Analytics

ROI  
**224%**

Net Present Value,  
Per Employee  
**\$452**



## Adobe Audience Manager

ROI  
**210%**

Net Present Value,  
Per Employee  
**\$401**

## Executive Summary







With an ever-growing array of customer interactions, especially digital, businesses are rapidly looking to gain competitive advantage by using data and insights at scale to create and activate 360-degree profiles of their customers to deliver a better experience. In a rush to accelerate digital growth and improve their business strategies, many global enterprises have built siloed, redundant technology environments, resulting in inaccurate, or worse, conflicting views of their customer's brand interactions. For example, Forrester's research reveals that 90% of enterprises use multiple analytics tools.<sup>1</sup>

Adobe commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study to examine the potential ROI enterprises may realize by adopting Adobe Analytics and Adobe Audience Manager. Adobe Analytics provides businesses with customer and digital intelligence that enables organizations to create robust insights and customer profiles. With Adobe Audience Manager, business can build meaningful audiences that can be acted on in real time. Together, these solutions help businesses grow digital engagement, democratize audience insights, improve the customer experience, and drive revenue growth.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed eight customers with years of experience using Adobe Analytics (AA) and Adobe Audience Manager (AAM).

Prior to using Adobe Analytics, organizations used a variety of homegrown and off-the-shelf analytics solutions which offered limited visibility into channel, segment, and customer-level performance. Additionally, while Adobe Audience Manager was the first data management platform (DMP) used by several interviewed organizations, others had experience using DMPs that integrated poorly with the rest of their analytics and marketing stack, making attribution modeling, accurate segmentation, and cross-device identity and data management a continuous struggle.

## Key Findings

Benefit Category		Adobe Analytics	Adobe Audience Manager
 Increase in site traffic		▲ 3%	▲ 7%
 Increase in conversion rate		▲ 13%	▲ 8%
 Increase in average order value		▲ 5%	▲ 5%
 Increase in upselling		▲ 18%	▲ 42%
 Reduction in cost per click		▲ 2.5%	▲ 4%
 Number of FTEs refocused on business priorities		10 FTEs	2 FTEs

## Combined Analytics And Audience Manager Analysis (Three-Year)



**ROI**  
**217%**



**Benefits PV**  
**\$12.5 million**



**NPV**  
**\$8.5 million**



**Payback**  
**<6 months**

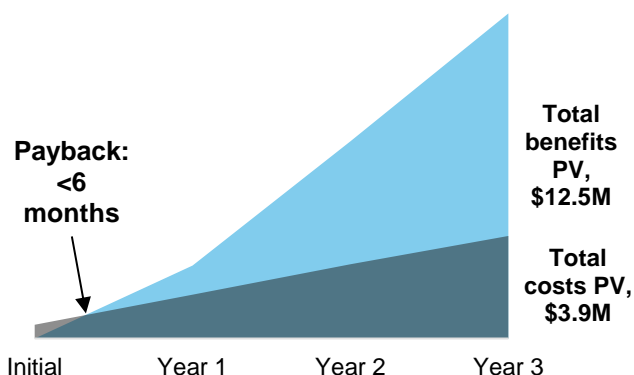


**NPV per employee**  
**\$853**

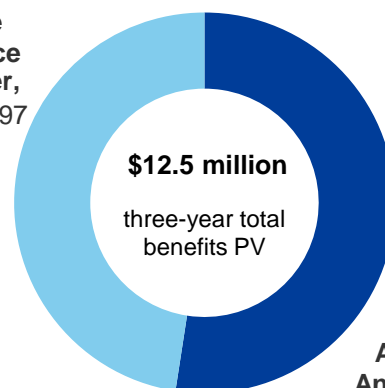
**Quantified benefits.** The following risk-adjusted present value (PV) quantified benefits are representative of those experienced by the interviewed organizations:

- › **10% growth in net new site traffic by discovering high-value audiences.** By capturing digital and customer insights using Adobe Analytics and lookalike modeling to identify and guide the targeting of new high-value audience segments using Adobe Audience Manager, interviewed organizations saw significant upticks in their site traffic. Adobe Analytics and Adobe Audience Manager created 3% and 7% uplifts in site traffic, respectively. Over three years, the uplift in profit from increased traffic from both solutions totaled a PV of \$2.5 million.
- › **Improved customer journey analytics, personalization, and targeting drove a 21% increase in conversion rates across web and mobile.** Adobe Analytics and Adobe Audience Manager delivered 13% and 8% upticks in site conversion rates, respectively, generating a PV of \$4.4 million in incremental profit over the three-year analysis.
- › **10% increase in average order values by attracting higher value customers.** By discovering and engaging higher value audiences using Adobe Audience Manager and guiding the optimization of web and mobile experience using insights from Adobe Analytics, the organization generated a PV of \$2.2 million in additional profit over three years.
- › **Rich profiles and improved customer understanding increased upselling on known accounts by 60%.** In creating advanced segments of loyal customers and driving repeat visits through guiding the optimization of the customer experience with Adobe Audience Manager and Adobe Analytics, the organization increased profit by a PV of \$1.1 million over three years.
- › **6.5% reduction in cost-per-click through media efficiencies and ad suppression.** By bringing audience management in-house, and gaining a better understanding of the number of ads needed to convert a customer, and suppressing ads to audiences unlikely to convert, the organization was able to reduce their cost-per-click by over 6% using Adobe Audience Manager and Adobe Analytics.
- › **Refocused 12 full-time equivalents (FTEs) to other business priorities through increasing process efficiencies and the retirement of legacy systems.** By streamlining workflows of segmentation, personalization, anomaly detection, attribution, identity management, and reporting functions, and by retiring redundant legacy reporting tools, the organization was able to refocus 12 FTEs to additional value-added activities by Year 3 of the analysis.

### Financial Summary



**Adobe Audience Manager,**  
**\$5,926,297**



**Adobe Analytics,**  
**\$6,533,248**

## Adobe Analytics



**Benefits PV**  
**\$6.5 million**



**Costs PV**  
**\$2.0 million**



**NPV**  
**\$4.5 million**

## Adobe Audience Manager



**Benefits PV**  
**\$5.9 million**



**Costs PV**  
**\$1.9 million**



**NPV**  
**\$4.0 million**

**Costs.** The interviewed organizations experienced the following risk and present-value adjusted costs, which have been included in the financial analysis for the composite organization:

- › **Adobe software licensing costs.** These are the software licensing fees and data volume costs paid to Adobe for Adobe Analytics and Adobe Audience Manager, which totaled a PV of \$1.12 million over three - years.
- › **Professional and managed services fees.** These are fees paid to professional services firms to assist with the initial proof of concept and full implementation and optimization of both Adobe Analytics and Adobe Audience Manager, including site tagging, data feed set up, system integration, custom coding, and testing. Additionally, this cost category includes ongoing managed services for future site tagging and advanced segmentation support. Professional and managed services fees totaled a PV of \$470,554 over three -years.
- › **Internal resource costs.:** These are internal full-time equivalent (FTE) resources dedicated for six months to the Adobe Analytics and Adobe Audience Manager implementation project, along with two FTE analytics resources and two FTE segmentation analysts dedicated to working with these technologies on an ongoing basis over the three-year analysis. Internal resources costs totaled a PV of \$2.1 million over the analysis..
- › **Training costs.** These are the training costs for new and existing Adobe Analytics and Adobe Audience Manager users. Training costs totaled a PV of \$244,213 over the three-year analysis.

Forrester's interviews with eight existing customers and subsequent financial analysis found that an organization based on these interviewed organizations experienced risk and present- value adjusted benefits of \$12,459,545 million over three years versus costs of \$3,931,223, adding up to a net present value (NPV) of \$8,528,322 and an ROI of 217%. The individual risk- -and -present- value- adjusted benefits, costs, and net present values of both Adobe Analytics and Adobe Audience Manager can be found on in the side bar.

The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

## TEI Framework And Methodology

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ (TEI) analysis for organizations considering an investment in Adobe Analytics and Adobe Audience Manager.

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 in evaluating the impact that Adobe Analytics and Adobe Audience Manager can have on an organization:



### **DUE DILIGENCE**

Interviewed Adobe stakeholders and Forrester analysts to gather data relative to Adobe Analytics and Adobe Audience Manager.



### **CUSTOMER INTERVIEWS**

Interviewed eight organizations using Adobe Analytics or Adobe Audience Manager 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 business impact of Adobe Analytics and Adobe Audience Manager: benefits, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

## DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Adobe 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 Adobe Analytics and Adobe Audience Manager.

Adobe 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.

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



# The Adobe Analytics & Audience Manager Customer Journey

## BEFORE AND AFTER THE ADOBE INVESTMENT

### Interviewed Organizations

For this study, Forrester conducted eight interviews with Adobe Analytics and Adobe Audience Manager customers. Interviewed customers included the following:

INDUSTRY	REGION	INTERVIEWEE TITLE	ADOBE PRODUCTS
Telecommunications	North America	Senior solution architect	Adobe Analytics and Adobe Audience Manager
Hospitality	North America	Director of web and digital analytics	Adobe Analytics and Adobe Audience Manager
Financial services	Global	Head of digital solutions	Adobe Analytics and Adobe Audience Manager
Media	EMEA	Director, customer data and marketing technology	Adobe Analytics and Adobe Audience Manager
Financial services	North America	Digital product manager, digital reporting and visualization	Adobe Analytics and a pilot around Adobe Audience Manager
Retailer	North America	Director, e-commerce analytics	Adobe Analytics
Technology services	Global	Director of digital marketing platforms	Adobe Analytics and Adobe Audience Manager
Travel and leisure	Global	Director of analytics and customer insights	Adobe Analytics and Adobe Audience Manager

### Key Challenges

Prior to adopting Adobe Analytics and Adobe Audience Manager, interviewees spoke of several challenges and pain points hampering their growth and customer experience:

- › **Disjointed and unreliable view of the customer.** In the face of changing customer buying behaviors, organizations struggled to integrate and gather meaning from their siloed customer and digital intelligence data stores. According to the director of digital analytics at a global travel company, “We needed a way to better integrate our web analytics with our CRM, email, campaign management, and other marketing stack technologies.”
- › **Poor visibility into segment-level performance and drivers.** A holistic digital segmentation strategy was made nearly impossible by decentralized and fragmented data management tools spread across multiple brands and lines-of-business.
- › **Inability to make data-driven decisions.** While all organizations sought competitive advantage through the use of data, interviewees struggled to effectively leverage their first-party data and acquired second- and third-party data to inform their targeting and media strategies using their siloed legacy technologies. Furthermore, manual and time-consuming data analysis and reporting processes inhibited real-time campaign course corrections and web optimizations.

“We wanted to create a center of excellence around an enterprise-level digital analytics and reporting platform . . . our legacy analytics tools couldn't support this. In order to optimize and make our website a legitimate sales channel, we needed an enterprise class platform.”

*Senior solution architect,  
telecommunications company*



## Solution Requirements

The interviewed organizations specified the following reasons for choosing Adobe Analytics and Adobe Audience Manager:

- › **Ability to democratize data and drive more effective decision making.** Interviewees were pivoting their strategy to become more customer-centric and wanted to make analytics and data-driven decisioning a way of life for their employees. According to the director of analytics and customer insights at a travel company: “We are pivoting to be a much more customer-centric organization. In order to do that, you need to get data in front of people, and our legacy analytics software was not good for that.”
- › **A DMP that closely integrates with analytics.** Interviewees needed to be able to easily ingest behavioral data from their analytics tools to their DMP without having to think about the plumbing. According to an interviewed media and entertainment company: “We’ve invested so heavily in analytics and all of our behavior and understanding is driven out in analytics. We needed to find a DMP that closely integrated with our analytics tool.”

“Our previous analytics and DMP solutions assigned different IDs to track cookies and device profiles — we had to manually match these. This ended up degrading our ability to match segments and receive them back into our targeting services.”

*Director of customer data and marketing technology, media company*



## Key Results

The interviewees revealed the following key results and business outcomes from their investments in Adobe Analytics and Adobe Audience Manager, including:

- › **Improved efficiency and effectiveness of marketing and media spend.** Enhanced visibility into the performance of marketing and advertising strategies and campaigns in engaging and converting customers helped some organizations achieve media spend savings as high as 10% of total original spend.
- › **Improved customer experience and engagement.** Poor web and mobile experiences were transformed into competitive advantage. Even small changes to the customer experience could generate massive business impacts. For instance, the director of e-commerce analytics at an interviewed retail company stated: “The biggest catalyst for the growth of our conversion rate has been our ability to read the impact of improvements to the features and functionality of the site. Small tasks, like making the ‘add to cart’ button bigger have been proven to be worth tons of money.” Another organization saw more than 50% reduction in their bounce rates. One organization saw a 7% reduction in their cart abandonment. All of this boosted customer engagement and loyalty, with one organization seeing a spike in membership in their customer loyalty program and another seeing a 60% increase in the upselling conversion rate for loyalty program members.
- › **Elimination of redundant legacy technologies and manual marketing operations tasks.** Several organizations retired multiple, redundant web tracking and analytics tools along with their legacy DMPs. In addition, organizations were able to refocus multiple FTE analysts and IT administration staff to other priorities that helped grow the business and improve the customer experience.

“We’ve seen reductions in our cost per conversion as high as 25% to 40% overnight using audience suppression for our campaigns.”

*Director of analytics and customer insights, travel and leisure company*



“We’ve seen a 40% uplift in performance across the marketing funnel from awareness through purchase . . . Our conversion off of display media increased 4x from 2% to 9%.”

*Director of e-commerce analytics, retail company*





- › **Revenue and profit growth from full funnel performance improvements.** As described in detail in the following sections, interviewed organizations saw significantly higher brand engagement, site traffic, conversion rates, and average order values after implementing Adobe Analytics and Adobe Audience Manager.

## Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. The composite organization is representative of the eight companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews has the following characteristics:

- › The organization is a US-based consumer goods company with \$4 billion in annual revenue and 10,000 employees. The organization sells through the retail channel and third-party websites, and they sell direct-to-consumer through its e-commerce footprint.
- › It has 10 web properties, a progressive web application (PWA), and two mobile applications across its portfolio of three brands.
- › Prior to adopting Adobe Analytics and Adobe Audience Manager, the organization had multiple analytics tools and a home-built server logging tool, deployed on-premises, and managed by a team of ten IT administrators and analysts. These pre-existing analytics systems provided only general, aggregate data, inhibiting the organization from determining which segments and customers were engaging with its brand.
- › Adobe Audience Manager was the composite organization's first data management platform.
- › Prior to adopting Adobe Analytics and Adobe Audience Manager, organization had average annual site traffic of 30 million visitors, an average order value of \$50, and an average operating profit margin of 20%.
- › Following a brief RFP process, the organization selected Adobe Analytics and Adobe Audience Manager due to its seamless integration. To implement the solutions, the organization engaged Adobe professional services to conduct a proof-of-concept and full implementation of both Adobe Analytics and Adobe Audience Manager over the course of six months.
- › The organization has 70 active users across both Adobe Analytics and Adobe Audience Manager.

"We've used Adobe Analytics and Adobe Audience Manager to identify potential attributes that predict the likelihood of someone joining our loyalty program. We have seen a jump in the percentage in site visitors who join our loyalty program."

*Director of web and digital analytics, hospitality company*



# Analysis of Benefits

## QUANTIFIED BENEFIT DATA AS APPLIED TO THE COMPOSITE ORGANIZATION

### Total Benefits

REFERENCE (REF.)	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Profit growth from increased site traffic	\$543,780	\$1,185,030	\$1,303,533	\$3,032,343	\$2,453,073
Btr	Profit growth from increased conversion rate	\$1,782,000	\$1,782,000	\$1,782,000	\$5,346,000	\$4,431,570
Ctr	Profit from increased average order value	\$615,600	\$1,026,000	\$1,026,000	\$2,667,600	\$2,178,419
Dtr	Profit growth from more effective upselling	\$0	\$677,160	\$677,160	\$1,354,320	\$1,068,397
Etr	Media efficiencies reinvested into the business	\$136,800	\$273,600	\$273,600	\$684,000	\$556,039
Ftr	Marketing, customer insights, and IT labor savings	\$0	\$813,671	\$1,463,557	\$2,277,228	\$1,772,047
	Total benefits (risk-adjusted)	\$3,078,180	\$5,757,461	\$6,525,850	\$15,361,491	\$12,459,545

### Profit Growth From Increased Site Traffic

In an effort to increase site traffic and ultimately drive growth in leads, opportunities, and new customers, all interviewees were investing significantly in data management and digital analytics. Siloed and redundant analytics tools made it very difficult to identify which strategies drove customers to their web and mobile channels. Furthermore, the majority of interviewees noted that their existing analytics and audience management technologies couldn't deliver granular, deep dive insights on which segments and specific customers were engaging with their brands.

With Adobe Audience Manager, organizations began to enrich their first-party data with second- and third-party data, enabling them to build larger and richer marketable audiences using lookalike modeling. In addition, organizations were better positioned to capture granular, customer-level, cross-channel insights using Adobe Analytics, giving them an empirical way to optimize the web experience and customer journey. Using Adobe Analytics and Adobe Audience Manager together, organizations increased their addressable audience size and identified new high-value audience segments, ultimately driving a 10% increase in net new site traffic.

In modeling the impact of Adobe Analytics and Adobe Audience Manager in driving site traffic growth, Forrester made the following assumptions from our research:

- › The organization has a baseline average of 30 million unique site visitors per year prior to adopting Adobe Analytics and Adobe

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to be a PV of nearly \$12.5 million.



**Increase in site traffic**

**Adobe Analytics**

**↑ 3%**

**Adobe Audience Manager**

**↑ 7%**

Audience Manager. We only calculated the impact of the incremental 5% to 10% uplift in traffic in order to not double count benefits.

- Following its adoption of Adobe Analytics and Adobe Audience Manager, the organization saw a 10% uplift in net new traffic, driven by a 7% increase attributed to actions guided by Adobe Audience Manager and a 3% increase from actions guided by Adobe Analytics. Due to the initial six-month implementation period, the organization only saw a 5% uplift in site traffic in Year 1 of the analysis.
- The organization has a blended, post-Adobe conversion rate of 3.8%, which accounts for the increase in conversion described in detail in the next benefit category. All net new traffic converts at the post-Adobe blended rate. Reader can apply their actual conversion rates in assessing the magnitude of this benefit for their own organization.

The composite organization has a post-Adobe average order value of \$55 and maintains a gross profit margin of 20%. The uplift in average order value, which is applied to all net new site traffic, is described in detail in the 'Profit Growth From An Increase In Average Order Values' benefit category discussion later in this study.

Interviewees varied in the degree they could drive top of the funnel improvements in site traffic and other brand and product engagement metrics. In addition, the magnitude of this profit impact of will vary with each organization's current site traffic, conversion rate, average order values, and profit margins, which vary across industries, regions, and specific companies. To account for these uncertainties, Forrester adjusted this benefit downward by 10%, yielding a three-year risk adjusted total PV of over \$2.5 million.

"We have consistently measured 10% to 15% increases in site traffic year-over-year since we moved to Adobe. More importantly, the quality of that traffic and how it converts into a lead has improved by almost 5%."

*Director of digital marketing  
platforms, technology company*



Impact risk is the risk that the business or technology needs of the organization may not be met by the investment, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for benefit estimates.

#### Profit Growth From Increased Site Traffic: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
A1	Baseline unique site visitors before adopting AA and AAM (per year)	$A1_{PY} + A3$	30,000,000	31,500,000	34,650,000
A2	Growth in site traffic, annually		5%	10%	10%
A3	Increase in site traffic after optimization with AA and AAM	$A1 * A2$	1,500,000	3,150,000	3,465,000
A4	Post-Adobe conversion rate (blended)		3.8%	3.8%	3.8%
A5	Average order value		\$53	\$55	\$55
A6	Profit margin		20%	20%	20%
At	Profit growth from increased site traffic	$A3 * A4 * A5 * A6$	\$604,200	\$1,316,700	\$1,448,370
	Risk adjustment	↓10%			
Atr	Profit growth from increased site traffic (risk-adjusted)		\$543,780	\$1,185,030	\$1,303,533

"We've seen bounce rates from certain sources as high as 80%. Using Adobe Analytics, we're able to cut out sources that have very high bounce rates, where we are not getting our money's worth. We've seen our bounce rate as high as 40% and now we are hovering around 19%. We've seen dramatic improvement there."

*Director of e-commerce analytics, retail company*



## Profit Growth From Increased Conversion Rate

Interviewed organizations highlighted the opportunity to optimize their customer's digital experience to drive performance uplifts further down the marketing and sales funnel. For instance, one interviewee noted that they saw bounce rates as high as 80% from certain sources before the use of Adobe Analytics and Adobe Audience Manager, with their overall bounce rate hovering around 40% prior to adopting Adobe Analytics. In addition, organizations suffered from high cart abandonment rates and had limited capabilities around identifying and remediating anomalies that could hurt sales and damage the customer experience.

Using Adobe Analytics, interviewees were able to tag and analyze detailed customer journey analytics, using insights to guide the removal of friction from the payments page and optimization of the end-to-end customer experience across the buying journey. In addition, machine learning capabilities used across interviewees' digital channels enabled organizations to automatically surface anomalies and conduct contribution analyses, enabling them to identify casual factors and remediate issues that impact the customer experience.

As a result, the organization experienced a 7% reduction in cart abandonment rates and a 50% reduction in bounce rates using Adobe Analytics. Lastly, using Adobe Audience Manager, interviewees noted that they could better leverage rich audience behavioral profiles to better target and drive personalization to customers, improving their likelihood to convert. Collectively, these solutions drove a 21% increase in conversion rates across web and mobile, driven by 13% and 8% upticks in site conversion rates from Adobe Analytics and Adobe Audience Manager, respectively.

For the composite organization, Forrester assumes that:

- › The organization has a baseline average of 30 million unique site visitors per year prior to adopting Adobe Analytics and Adobe Audience Manager. The mix of this traffic is 70% web and 30% mobile.
- › Prior to adopting Adobe Analytics and Adobe Audience Manager, the composite organization had a 4% and 1% conversion rate on web and mobile traffic, respectively.
- › After implementing Adobe Analytics and Adobe Audience Manager, the composite organization saw a 15% increase in its conversion rate on web visits, while it saw an 80% increase in the conversion rates on mobile web visits, netting an average conversion rate uplift of 21% across all digital visits.
- › The composite organization has a pre-Adobe average order value of \$50 and maintains a gross profit margin of 20%.

Conversion rate uplifts from the use of Adobe Analytics and Adobe Audience Manager will vary depending on how well optimized your web and mobile experiences are prior to adopting the technologies and whether each organization used a DMP prior to Adobe's Audience Manager. Additionally, conversion rates, average order values, and profit margins will vary significantly across industries, regions, and companies. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$4.4 million.



### Increase in conversion rate

#### Adobe Analytics

↑ 13%

#### Adobe Audience Manager

↑ 8%

"We built a dynamic payroll experience using data from Adobe's Audience Manager to tailor and personalize our offering for specific customers. This increased conversion to subscribe by about 16%."

*Director of customer data and marketing technology, media company*



"[Before Adobe] we had an extremely low conversion rate on mobile, somewhere in the 1% to 1.5% range. Now, we're closer to 3% on mobile due to site upgrades and our optimization efforts and the analytics that inform our strategy."

*Director of e-commerce analytics, retail company*



## Profit Growth From Increased Conversion Rate: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	Average unique site visitors before adopting AA and AAM (per year)		30,000,000	30,000,000	30,000,000
B2	Percentage of visits on web		70%	70%	70%
B3	Percentage of visits on mobile		30%	30%	30%
B4	Conversion rate on web traffic before AA and AAM		4.0%	4.0%	4.0%
B5	Conversion rate on mobile traffic before AA and AAM		1.0%	1.0%	1.0%
B6	Increase in conversion rate on web traffic		15%	15%	15%
B7	Increase in conversion on mobile traffic		80%	80%	80%
B8	Increased closed business using AA and AAM	$(B1*B2*B4*B6)+(B1*B3*B5*B7)$	198,000	198,000	198,000
B9	Average order value		\$50	\$50	\$50
B10	Profit margin		20%	20%	20%
Bt	Profit from increased conversion rate	$B8*B9*B10$	\$1,980,000	\$1,980,000	\$1,980,000
	Risk adjustment	↓ 10%			
Btr	Profit from increased conversion rate (risk-adjusted)		\$1,782,000	\$1,782,000	\$1,782,000

## Profit Growth From An Increase In Average Order Value

Interviewed organizations were hyper-focused on growing the value of their existing customer relationships, investing heavily in personalized content at each customer journey touchpoint in an attempt to drive growth in average order and customer lifetime values. Interviewees used Adobe Audience Manager to identify, create, and activate high-value audiences using targeted messaging and content to lift average transaction sizes and conversion frequency. Furthermore, organizations compounded the impact of Adobe Audience Manager by using Adobe Analytics to optimize the web experience, carefully designing product pages in a way that generates larger deal sizes.

Using Adobe Audience Manager and Adobe Analytics to build and retain high-value audiences with a well-curated web experience, the composite organization experienced a 10% increase in average order values. In modeling the profit impact of higher average order values using these Adobe technologies, Forrester makes the following assumptions:

- › The organization has a baseline average of 30 million unique site visitors per year prior to adopting Adobe Analytics and Adobe Audience Manager.
- › The organization has a blended, post-Adobe conversion rate of 3.8%, which accounts for the increase in conversion rate described previously.
- › After implementing Adobe Analytics and Adobe Audience Manager, the composite organization saw a 10% increase in its average order values,

“Historically, we’ve seen a much smaller average order size on mobile. We’ve driven at least a 15% increase in average order size by optimizing the customer experience on mobile to drive customers to purchase more than one item per transaction.

Director of e-commerce analytics, retail company



equating to \$5 per order. Half, or 5%, of this increase was realized during Year 1 of the analysis due to the organization's implementation period and associated learning curve.

- › The composite organization maintains a gross profit margin of 20%.

Conversion rates, average order values, and profit margins can be heavily impacted by external factors, including macroeconomic headwinds, competitive factors, and operational challenges. In addition, the magnitude of this uplift will vary significantly depending on an organization's digital, data, and customer experience maturity levels and whether a DMP was used prior to investing in and adopting Adobe Analytics and Adobe Audience Manager. Notably, Forrester's analysis and relevant Forrester research reveals the potential for 15% or higher increases in average order values from improved targeting of qualified, more engaged, and deeply informed audiences and leads.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$2.2 million. Readers should calculate the impact of a 10% increase in their average order value using their own traffic, conversion rate, and profit margin figures using the framework provided below. Organizations with higher digital maturity levels and existing DMPs should consider using lower uplift estimates.



## Increase in average order value

Adobe Analytics

↑ 5%

Adobe Audience Manager

↑ 5%

**Profit Growth From An Increase In Average Order Value: Calculation Table**

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
C1	Baseline total site visits per year		30,000,000	30,000,000	30,000,000
C2	Post-Adobe conversion rate from visits to closed business (blended)		3.8%	3.8%	3.8%
C3	Baseline average order value		\$50	\$50	\$50
C4	Increase average order value		5%	10%	10%
C5	Increase in average order value	C3*C4	\$3	\$5	\$5
C6	Profit margin		20%	20%	20%
Ct	Profit growth from increased average order value	C1*C2*C5*C6	\$684,000	\$1,140,000	\$1,140,000
	Risk adjustment	↓ 10%			
Ctr	Profit growth from increased average order value (risk-adjusted)		\$615,600	\$1,026,000	\$1,026,000

## Profit Growth From More Effective Upselling

In an effort to contain customer acquisition costs (CAC), interviewees were committed to improving the effectiveness of upselling and cross-selling initiatives. Using Adobe Audience Manager, interviewees built rich audience profiles while driving growth in their customer loyalty programs. By creating targeted, personalized messaging and content for these loyal, "known accounts," organizations were able to upsell these accounts and improve the conversion rate by up to 60%.

For the composite organization, Forrester assumes that:

- › 20% of the organization's 30 million unique annual site visits create accounts or join the customer loyalty program, becoming known accounts.



- › The conversion rate in upselling known accounts grows from 1.84% to 3% following the introduction of the Adobe solutions, with Adobe Audience Manager contributing 42% and Adobe Analytics contributing 18% of this overall 60% increase. None of this uplift in upselling is realized during the first year of this analysis due to the implementation period and learning curve.
- › A \$53 to \$55 average order value and 20% profit margin was used in calculating the magnitude of this profit increase.

Upselling to loyal or known accounts may be impacted by external factors, including branding effectiveness and the overall customer experience. Notably, several interviewees revealed that average order values from rewards program members can be lower due to discounting and promotions. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted- total PV of \$1,068,397.

"We didn't have the deep-dive visibility into how we were performing with segments of customers. For instance, customers who just got credit from us, how are they doing? For those customers who typically only purchase during the holidays, are we driving them back more often?"

*Director of e-commerce analytics, retail company*



#### Profit Growth From More Effective Upselling: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
D1	Number of known accounts		6,000,000	6,000,000	6,000,000
D2	Increase in conversion rate		0.00%	1.14%	1.14%
D3	Average order value	C3+C5	\$53	\$55	\$55
D4	Profit margin		20%	20%	20%
Dt	Profit growth from more effective upselling	D1*D2*D3*D4	\$0	\$752,400	\$752,400
	Risk adjustment	↓10%			
Dtr	Profit growth from more effective upselling (risk-adjusted)		\$0	\$677,160	\$677,160

## Media Efficiencies Reinvested In The Business

According to Forrester Analytics' Global Business Technographics® Marketing Survey, B2C marketers allocate 26% of their budget to programs and media, making it the largest line item in their budget.<sup>2</sup> As such, improving the efficiency and effectiveness of media spend was the primary reason B2C marketers cite for adopting a data management platform.<sup>3</sup>

Interviewees' use of Adobe Audience Manager, and, to a degree, Adobe Analytics, enabled them to gain a better understanding of the type and volume of ads needed to convert a customer. In addition, organizations saved money from suppressing ads to audiences unlikely to convert and by bringing audience management in-house. Using these tools, interviewees were able to reduce their cost-per-click by \$0.06, or 6.5%, using Adobe Analytics and Adobe Audience Manager. Notably, several organizations using Adobe Analytics and Adobe Audience Manager, alongside other elements of the Adobe Experience Cloud stack, saw media efficiencies and savings north of 10% of total media spend.

For the composite organization, Forrester assumes that:

- › The organization serves 20 million impressions per month with a 2% click-through rate (CTR).



### Media efficiencies reinvested

Adobe Analytics

↑ 2.5%

Adobe Audience Manager

↑ 4%

- › The organization's cost-per-click was reduced by \$0.06 using Adobe Analytics and Adobe Audience Manager. Only 50% of this reduction was realized in Year 1 of the analysis.

Actual savings from media efficiencies will vary depending on how well optimized each organization's media budget is prior to adopting Adobe Analytics and Adobe Audience Manager. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of \$556,039.

**Media Efficiencies Reinvested In The Business: Calculation Table**

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
E1	Number of impressions served per month		20,000,000	20,000,000	20,000,000
E2	Click-through rate (CTR)		2%	2%	2%
E3	Clicks served per month		400,000	400,000	400,000
E4	Reduction in cost per click with AA and AAM		\$0.03	\$0.06	\$0.06
E5	Months per year		12	12	12
Et	Media efficiencies	$E3 \times E4 \times E5$	\$144,000	\$288,000	\$288,000
	Risk adjustment	↓5%			
Etr	Media efficiencies (risk-adjusted)		\$136,800	\$273,600	\$273,600

## Marketing, Customer Insights, And IT Labor Savings

Using Adobe Analytics and Adobe Audience Manager, interviewees were able to streamline and automate several formerly manual personalization, lead scoring, anomaly detection, marketing performance management, and reporting processes. Furthermore, a number of customers were able to retire redundant legacy web analytics tools, enabling them to repurpose IT administration and analyst staff to other value-added activities.

In modeling the cost savings from marketing, customer insights, and IT staff efficiencies using Adobe Analytics and Adobe Audience Manager, Forrester makes the following assumptions:

- › Two FTE junior analysts were refocused to other business priorities in years 2 and 3 of the analysis from overall automation embedded in the Adobe toolset.
- › Ten FTE IT administration and analyst staff members were refocused following the retirement of the organization legacy analytics tools.

Analyst and IT staff salaries will vary across regions and industries. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of \$1.8 million.



**Two FTEs:**  
Junior analysts  
repurposed

**Ten FTEs:**  
IT admin and analyst  
staff repurposed through  
the retirement of legacy  
web analytics tools

## Marketing, Customer Insights, And IT Labor Savings: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
F1	Number of junior data analysts repurposed (in FTEs)		0	2	2
F2	Junior data analyst fully loaded salary		\$90,992	\$90,992	\$90,992
F3	Number of analysts and IT admins repurposed from legacy web tracking tool (in FTEs)		0	5	10
F4	Average fully loaded salary (blended team)		\$144,419	\$144,419	\$144,419
Ft	Marketing, customer insights, and IT labor savings	$(F1 \times F2) + (F3 \times F4)$	\$0.00	\$904,079.15	\$1,626,173.90
	Risk adjustment	↓5%			
Ftr	Marketing, customer insights, and IT labor savings (risk-adjusted)		\$0	\$813,671	\$1,463,557

# Analysis of Costs

## QUANTIFIED COST DATA AS APPLIED TO THE COMPOSITE ORGANIZATION

### Total Costs

REF.	COST	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Gt	Adobe software licensing costs	\$0	\$450,000	\$450,000	\$450,000	\$1,350,000	\$1,119,083
Htr	Professional and managed service costs	\$297,000	\$0	\$110,000	\$110,000	\$517,000	\$470,554
ltr	Internal resource costs	\$225,989	\$752,511	\$752,511	\$752,511	\$2,483,522	\$2,097,373
Jtr	Training	\$0	\$74,982	\$93,728	\$131,219	\$299,928	\$244,213
	Total costs (risk-adjusted)	\$522,989	\$1,277,493	\$1,406,238	\$1,443,730	\$4,650,450	\$3,931,223

### Adobe Software Licensing Costs

Interviewees paid Adobe software licensing fees and data volume costs for their use of Adobe Analytics (AA) and Adobe Audience Manager (AAM). While the exact licensing and data volume fees varied across interviewees, the costs used in Forrester's model represent the higher end of the reported scale. As such, Forrester has made no risk adjustment to the model.

- › Actual Adobe software licensing and data volume fees incurred will vary based on the following factors:
- › Annual, contractual data volume commitments and any data overage fees beyond the initial commit rate.
- › The level of advanced analytics tooling required by your organization.

These costs yielded a three-year risk-adjusted total PV which totaled \$1.12 million.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total costs to be a PV of more than \$3.9 million.

### Adobe Software Licensing Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
G1	AAM licensing (annual)			\$200,000	\$200,000	\$200,000
G2	AA premium licensing (annual)			\$250,000	\$250,000	\$250,000
Gt	Adobe licensing costs	G1+G2		\$450,000	\$450,000	\$450,000

### Professional And Managed Service Costs

Organizations typically began their journeys to Adobe Analytics and Adobe Audience Manager with a proof-of-concept and pilot, typically within a specific brand or line-of-business. Following a successful pilot, organizations pursued full implementations for Adobe Analytics and Adobe Audience Manager.

While some customers managed the lion share of their Adobe implementation projects internally, the vast majority leveraged Adobe professional services or Adobe partners for initial implementation, site

tagging, data feed setup, system integration, custom coding, and testing. Initial implementation periods for Adobe Analytics and Adobe Audience Manager ranged from two months to nearly a year depending on the need for custom coding and development work.

In addition, a number of interviewed organizations leveraged managed services for site optimization and redesign support, ongoing tagging work, and to augment existing staff skill sets around advanced segmentation, web and mobile optimization, and multi-touch marketing attribution.

Forrester used the following assumptions to model professional and managed services costs for the composite organization:

- › Forrester estimates that the total duration of the implementation for Adobe Analytics and Adobe Audience Manager took six months.
- › The organization paid \$20,000 for the proof of concept and \$250,000 for the full implementation, system integration, development, and testing services for both Adobe Analytics and Adobe Audience Manager.
- › The organization spends \$100,000 annually on managed services for ongoing tagging support and staff augmentation.

The following factors may affect the actual Adobe services costs and timelines incurred by other organizations:

- › Size and complexity of the organization’s web, mobile, and data environment.
- › Need for customization and custom development work.

To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year risk-adjusted total PV of \$470,554.

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

Professional And Managed Service Costs: Calculation Table						
REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
H1	Proof of concept		\$20,000			
H2	Professional and managed services		\$250,000		\$100,000	\$100,000
HT	Professional and managed service costs	H1+H2	\$270,000		\$100,000	\$100,000
	Risk adjustment	↑10%				
Htr	Professional and managed service costs (risk-adjusted)		\$297,000		\$110,000	\$110,000

## Internal Resource Costs

Beyond the professional and managed services costs associated with implementing and supporting Adobe Analytics and Adobe Audience Manager, all organizations interviewed for the study dedicated analytics and digital marketing resources to supplement the work done by their service providers. Interviewees revealed that they typically dedicate two to three FTEs per Adobe workload in production, although internal staffing requirements varied across interviewees.

In modeling internal resource costs for the composite organization, Forrester makes the following assumptions:

- › The organization dedicated a full-time solution architect, data engineer, and project manager for six months to work with its professional services

partner during implementation of Adobe Analytics and Adobe Audience Manager.

- › Over the three-year analysis, the organization dedicated two FTE analytics resources and two FTE segmentation analysts to managing, supporting, and augmenting these technologies and evangelizing the use of data in improving the customer experience and making business decisions.

Internal resource costs will vary depending on the seniority and skill sets of the staff allocated to the implementation, management, administration, and ongoing development of Adobe Analytics and Adobe Audience Manager. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year risk-adjusted total PV of \$2.1 million.

#### Internal Resource Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
I1	Internal resource for implementation		\$205,445			
I2	Ongoing analytics resources			\$218,083	\$218,083	\$218,083
I3	Segmentation resources			\$226,018	\$226,018	\$226,018
I4	IT resources			\$240,000	\$240,000	\$240,000
It	Internal resource costs	I1+I2+I3+I4	\$205,445	\$684,101	\$684,101	\$684,101
	Risk adjustment	↑10%				
Itr	Internal resource costs (risk-adjusted)		\$225,989	\$752,511	\$752,511	\$752,511

## Training Costs

Interviewees indicated that they make investments in training new hires and current staff members on how to effectively use Adobe Analytics and Adobe Audience Manager in their jobs. Trainings covered best practices, how to interpret analytics and make data-driven decisions, and coverage of new product features and capabilities. Our model assumes that the composite organization allocates 8 hours per quarter for training on the Adobe stack for each of its users.

Training requirements will vary depending on the existing skill sets of each organization's existing analytics, customer insights, and digital marketing staff. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year risk-adjusted total PV of \$244,213.

#### Training Costs: Calculation Table

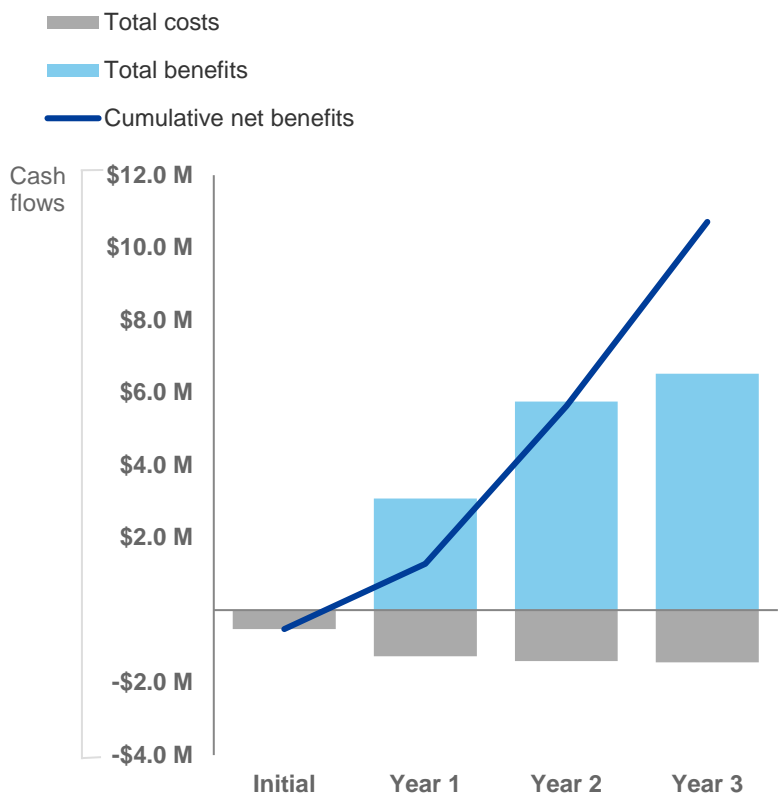
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
J1	Number of Adobe users		40	50	70
J2	Training hours per year	8 hours per quarter	32	32	32
J3	Average blended hourly salary for trained employees		\$53.25	\$53.25	\$53.25
Jt	Training costs	J1*J2*J3	\$68,166	\$85,207	\$119,290
	Risk adjustment	↑10%			
Jtr	Training costs (risk-adjusted)		\$74,982	\$93,728	\$131,219



# 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 Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	(\$522,989)	(\$1,277,493)	(\$1,406,238)	(\$1,443,730)	(\$4,650,450)	(\$3,931,223)
Total benefits	\$0	\$3,078,180	\$5,757,461	\$6,525,850	\$15,361,491	\$12,459,545
Net benefits	(\$522,989)	\$1,800,687	\$4,351,223	\$5,082,120	\$10,711,040	\$8,528,322
ROI						217%
Payback period						<6 months

# Adobe Analytics & Adobe Audience Manager: Overview

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

## About Adobe Analytics

Customer experience is driving the next wave of competitive advantage. To deliver standout experiences, you need clear, fast, and actionable insights. This means moving beyond simple data collection and web analytics to true customer intelligence. With Adobe Analytics, driven by artificial intelligence and machine learning, anyone in the enterprise can understand and improve how customers interact with their brand across all channels simply, instantaneously, and at massive scale. Adobe is the only company that unites content creation with data insights, blending art and science, to help brands activate compelling and consistent experiences across every device and customer touchpoint to help organizations become experience businesses. To learn more, please visit <https://www.adobe.com/analytics/adobe-analytics.html>.

## About Adobe Audience Manager

Adobe Audience Manager is the industry-leading data management platform (DMP). Adobe's DMP helps advertisers, publishers, and agencies effectively manage their audiences by consolidating data to build unique audience profiles, helping companies identify their most valuable audiences and target them across channels. Advertisers can grow their revenue and customer base through unified, actionable views of their audiences, while publishers provide advertisers unique audience segments that drive conversions. Our customers include Time Warner Cable, Lenovo, Scripps Network, Nordstrom, and Princess Cruises, among others. To learn more, please visit <https://www.adobe.com/analytics/audience-manager.html>.

# 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

---

<sup>1</sup> Source: "Vendor Landscape: Digital Intelligence Technology Providers You Should Care About," Forrester Research, Inc., February 17, 2017.

<sup>2</sup> Source: Forrester Data Global Business Technographics® Marketing Survey, 2017.

<sup>3</sup> Source: Forrester's Q2 2017 Global Data Management Platform Forrester Wave™ Customer Reference Online Survey.