FORRESTER®



The Total Economic Impact™ Of Tealium CDP

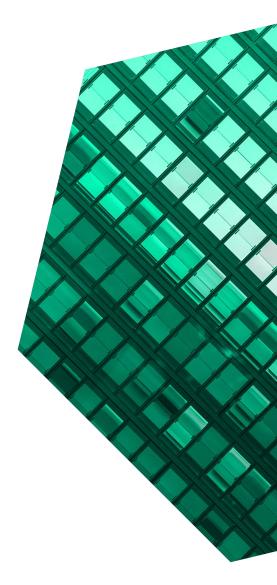
Cost Savings And Business Benefits Enabled By The Customer Data Platform

JANUARY 2022

Table Of Contents

Executive Summary1
The Tealium CDP Customer Journey6
Prior Environment6
Key Challenges6
Investment Objectives7
Why Tealium?8
Composite Organization9
Analysis Of Benefits10
Margin From Improved ReEngagement10
Margin From Increased Purchase Size12
Margin From New Sales From Right-Time Data Access14
Productivity Lift17
Technology Stack Optimization19
Unquantified Benefits20
Flexibility21
Analysis Of Costs22
Tealium Licensing And Services22
Internal Implementation, Training, And Ongoing Management Labor24
Financial Summary26
Appendix A: Total Economic Impact27
Appendix B: Supplemental Material28
Appendix C: Endnotes28

Consulting Team: Veronica lles



ABOUT FORRESTER CONSULTING

 $For rester Consulting\ provides\ independent\ and\ objective\ research-based\ consulting\ to\ help\ leaders\ succeed\ in\ their\ organizations.$

© Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on the best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impactare trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies.

Executive Summary

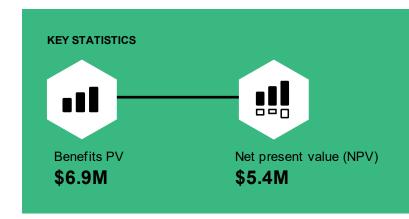
Marketers know that data fuels the modern marketing engine and that the foundation of customer-obsessed marketing requires them to collect, manage, and derive insights from this data. Tealium's Customer Data Platform (CDP) helps organizations meet a business-critical need: data management. Customers used Tealium to integrate silos, provide right-time data insights, and realize better business outcomes from knowing their customers.

Tealium has a demonstrated track record in tag management, and its customer data platform leverages this existing strength and adds a complementary function — customer data management. With these CDP capabilities, users can ingest omnichannel data, create a single view of their customers, and use it to trigger relevant, timely actions to audience segments.

Tealium commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential benefits enterprises may realize by deploying <u>Tealium's CDP</u>. ¹ The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Tealium's CDP on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five customers with experience using Tealium's CDP. For the purposes of this study, Forrester aggregated the experiences of the interviewed customers and combined the results into a single composite organization.

Prior to using Tealium's CDP, the customers used disconnected data to define customer journeys and activation. Data sources lacked integration and insights were stale. To top it off, data operations were less efficient, with limited automation and laborious manual tasks.



After the investment in CDP, the customers were able to normalize their customer data, add real-time data enrichment, and activate data downstream across the martech stack.

KEY FINDINGS

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

• Reengagement increased by 8.5% as campaigns recaptured additional value from abandoned conversion paths. Tealium's unified, accessible customer data enabled marketers to use more timely customer insights in downstream systems to drive outcomes like increased engagement rate and reduced cart abandonment. As a result, more customers converted and completed purchases. Over three years and with an average order value of \$400, the remarketing improvement is worth more than \$2.5 million of profit.

- Larger sales from improved customer segmentation and personalization. The unified customer profile and insights activated by Tealium enabled organizations to identify new segments and more specifically target existing segments. As a result, KPIs like purchase frequency and transaction value increased. Over three years, with a 3% increase to average order value, better personalization and segmentation is worth more than \$1.8 million in profit.
- "We don't know what the future will bring, and we need to be flexible to adapt to different situations that could happen in the future. Tealium is flexible and agile it's 100% cloud and 100% secure."

Regional CMO, financial services

- Increased revenue from right-time data insights. With Tealium's real-time capabilities, organizations overcame data lag and acted immediately on relevant customer insights. For the composite organization's use case, it was able to improve its ability to reach customers up to 200% more than with stale data. Over three years and with an average order value of \$400, the right-time data access is worth more than \$1.2 million of profit.
- Productivity lift for customer data-adjacent teams. With Tealium, organizations were able to do more with the same resources because it simplified integrations and automated manual processes. The composite organization's data-adjacent team of 12 experienced up to 25% lift across digital advertising, web analytics, and database operations teams. Over three years and a cumulative total of 8.3 FTEs, the improved productivity lift is worth \$590,000.

"We intend for Tealium to be the core of our digital personalization efforts. We're going to enrich the data environment with marketing, app, and omnichannel data. By integrating lots of juicy data sources, we can use it for segmentation and analysis, and ultimately, personalization."

Business intelligence lead, healthcare

Technology stack rationalization. Tealium tied together siloed departments and data pipeline use cases, enabling organizations to realize savings from reducing the need to maintain and license legacy products and integrations. Over three years, the optimized tech stack savings is worth more than \$782,000.

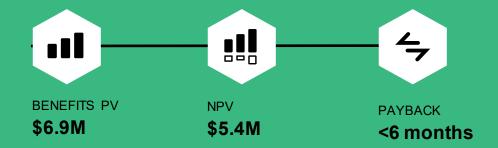
Unquantified benefits. Benefits that are not quantified for this study include:

- Better data visibility, which led to data governance improvements.
- Personalization, which drove better customer experience.
- Targeting improvements had a positive impact to return on ad spend (ROAS).

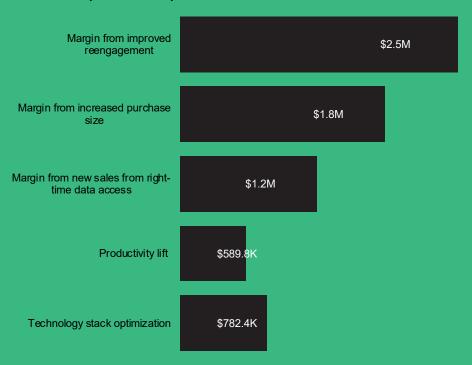
Costs. Risk-adjusted PV costs include:

- Licensing and service costs of \$1.1 million.
 Tealium's licensing is based on the number of data events, and it scales with the organization as use cases and insights derived from the data grow. The composite also takes advantage of implementation services provided by Tealium.
 Over three years, the licenses and services costs are \$1.1 million.
- Internal labor costs for implementation, administration, and training of \$438,000.
 Business and technical users dedicate time to the implementation and roll out of Tealium CDP over three months. A data management lead and senior analyst spend 50% of their time for iterative expansion, testing, insights development and activation. The composite also provides multi-day trainings to relevant employees. Over three years, internal labor costs total \$438,000.

Summary. The customer interviews and financial analysis found that a composite organization experiences benefits of \$6.9 million over three years versus costs of \$1.5 million, adding up to a net present value (NPV) of \$5.4 million.



Benefits (Three-Year)



To sum it up quickly, the main benefit of Tealium is cross-platform multisession digital personalization. Across our marketing stack, we have no way of creating a unified customer experience across these except for Tealium.



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 Tealium 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 Tealium CDP capabilities can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Tealium and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

For rester makes no assumptions as to the potential benefits that other organizations will receive. For rester strongly advises that readers use their own estimates within the framework provided in the study to determine the appropriateness of an investment in Tealium CDP.

Tealium reviewed and provided feed back to Forrester, but Forrestermaintains 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.

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



DUE DILIGENCE

Interviewed Tealium stakeholders and Forrester analysts to gather data relative to CDP use cases.



DECISION-MAKER INTERVIEWS

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



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewees' organizations.



FINANCIAL MODEL FRAMEWORK

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



CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. 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 Tealium CDP Customer Journey

Drivers leading to the Customer Data Platform investment

Interviewed Decision-Makers									
Interviewee	Industry	Region	Revenue	Employees					
Director of e-commerce, analytics, and tag management	E-commerce retail	Head quartered and operations in the US	\$1.5 billion	2,300					
Senior manager, global sales and marketing	Electronics	Headquartered in Asia, global operations	\$8.2 billion	100,000+					
Data intelligence manager	Financial services	Head quartered in Europe, global operations	\$52 billion	191,000					
IT enginæring lead	Financial services	Head quartered in the Netherlands	\$9.4 billion	17,800					
Business intelligence lead	Healthcare	Head quartered and operations in the US	\$77 billion	49,000					

PRIOR ENVIRONMENT

From a customer data management perspective, customers fell into one of the following maturity levels:

LOW

Siloed data that lacks integration across channels

Heavy dependency on CRM

Cross channel strategy absent

Ineffient operations and reliance on technical teams led to bottlenecks and errors

MEDIUM

Some channels talk to each other

Thinking and understanding of data cross channel

Doing some audience level personalization

No holistic vision for the data

HIGH

Understand data foundation

Have a cross channel data strategy and vision

"We custom-built our own data warehouse. Anytime there was a business change, more rules had to be built. We were spending more time and money to build and maintain an old platform that could not help us achieve personalization or improve customer engagement."

IT engineering lead, financial services

KEY CHALLENGES

The 2021 Forrester Analytics' Global Business Technographics® Marketing Survey found that 25% of marketing decision-makers agree that the lack of an enterprise view of master customer data is a problem, and 26% agree that their customer insights team takes too long to deliver needed insights. The interviewed decision-makers for this study supported

these metrics and discussed their common business and technical challenges, which included:

- Manual data processes were slow and errorprone. The organizations relied on inefficient manual efforts to piece together customer data across the enterprise's touchpoints. Data teams spent large amounts of time fulfilling requests for segmentation and struggled with integration across data systems.
- Stale data and inability to reach customers in real-time hindered campaign effectiveness. When data teams spent days "pushing data around," the customer insights provided were stale and frequently inaccurate. As a result, the customer segments did not always receive the right messages, campaigns often underperformed, and stale messaging created poor customer experiences (CX).

"Before the CDP, we had a lot of manual processes; there was a lot of pushing files around and writing SQL queries to select groups of people. We had lots of endpoint users that did their jobs very well, but getting them data and the orchestration was a huge challenge."

Director of e-commerce, analytics, and tag management, e-commerce retail

 Siloed data systems and departments struggled to holistically understand the customer. Without a customer data strategy, the enterprise sales, marketing, and service functions each used separate and siloed tools to keep track of customer interactions. As the systems were not integrated or connected to a single source of truth, it was impossible to develop a unified customer profile. As a result, organizations could neither develop nor execute effectively on multichannel marketing strategies.

"The main criteria that we had was our CDP had to be vendoragnostic. We purposefully don't have a full stack in any one vendor, and we don't want to be locked in to any one ecosystem. We like to go best of breed. So that was huge criteria which Tealium fit very well."

Director of e-commerce, analytics, and tag management, e-commerce retail

INVESTMENT OBJECTIVES

The interviewed decision-makers searched for a CDP solution that would help them achieve the following goals:

- Enable real-time personalization for multichannel marketing.
- Improve CX.
- Automate and optimize processes.
- Provide a unified customer profile.
- · Reduce cost per acquisition.
- Provide better cybersecurity.
- Align teams to the same business goals.
- Help meet data privacy compliance and regulations.



Customer Voices

"Tealium is the heart of our marketing landscape and the foundation of our personalization strategy."

IT engineering lead, financial services

•••

"We see Tealium as a strategy partner. As a test-heavy organization, Tealium's tool and open architecture provide very friendly tool testing and is easy to set up, so it presents opportunities to go with best-of-breed solutions."

Director of e-commerce, analytics, and tag management, e-commerce retail

•••

"We encountered other CDPs that did many of the same things but didn't do it in real time, and we really liked that we would be able to instantly act on customer actions."

Director of e-commerce, analytics, and tag management, e-commerce retail

WHY TEALIUM?

After evaluating several CDP vendors, the interviewed decision-makers selected Tealium as their CDP of choice because:

- Tealium's CDP integrates well with other technologies. Customers identified as a key differentiator Tealium's ability to work well with other vendors in their technology stacks.
- Data collection capabilities offer natural
 extension of value. Whether customers started
 with the CDP then expanded into enhanced data
 collection, or started with data collection and
 expanded into CDP capabilities, customers found
 ample opportunities to extend value with the
 breadth of Tealium's offering.
- Overall functionality and real-time capabilities. Customers noted that the CDP is a robust tool and stood out for its speed, ability to manage errors, and handle data.
- Flexible contract and pricing negotiation.
 Customers noted that Tealium was willing to include industry-specific contract language and that the pricing structure was the simplest.

"We want to be more impactful with our customer touchpoints and fulfill their needs better. With Tealium we can reduce mass communications and make more relevant communications, which improves the conversion funnel and sales as a result of becoming more personalized."

IT engineering lead, financial services

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an analysis that illustrates the areas financially affected by the Tealium CDP investment. The composite organization is representative of the five companies whose decision-makers 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. The composite is a global, multibillion-dollar business-to-consumer retailer with 3,500 employees. The organization is headquartered in North America, has a large customer base of about 10 million customers, and maintains a strong online and offline presence. The average purchase value of its products is \$400.

Before purchasing CDP capabilities, the composite gains multidepartment agreement that the organization has a data strategy problem.

Key assumptions

- \$2 billion annual revenue
- 3,500 employees
- \$400 average order value
- 10 million customers

Several teams (marketing, analytics, and database) understand and accept that they must work together to solve this challenge. The composite aims to provide the best customer experience through right-time and -place personalization and understand that the way to do this with the least friction is to streamline customer data through one pipeline to avoid duplication of personas and downstream errors.

Tealium CDP Customer Sizes And Verticals

The decision-makers interviewed for this study were representative of very large enterprise companies, and the size of the composite reflects this. However, businesses with the following characteristics, regardless of size, can benefit from Tealium CDP:

- The objective of providing the best possible customer experience and personalization.
- Multidepartment buy-in that they have a data problem.
 They understand and accept that they have to work together to solve this challenge with the help of technology.
- The need to be able to change processes to streamline data through one pipeline to avoid duplication of efforts.
- The staffing capabilities to test and roll out a new technology.
- · Multiple channels.

Although our composite organization is a retailer, Tealium can address the needs of the following B2B and B2C verticals:

- eCommerce organizations that have embraced digital transformation and have found value in marketing automation tools.
- Highly regulated industries like healthcare and financial services. These organizations have recently faced acute challenges because of the COVID-19 pandemic. By losing many of the face-to-face opportunities they previously relied on, these verticals have been forced to embrace technology to facilitate one-on-one conversations and personalization with customers.
- Other regulated industries including telecommunications and gambling.
- · Hospitality and travel.
- Media.

Analysis Of Benefits

Quantified benefit data as applied to the composite

Total	Total Benefits										
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value					
Atr	Margin from improved reengagement	\$842,400	\$1,095,120	\$1,095,120	\$3,032,640	\$2,493,656					
Btr	Margin from increased purchase size	\$675,000	\$742,500	\$816,750	\$2,234,250	\$1,840,909					
Ctr	Margin from newsales from right-time data access	\$280,800	\$617,760	\$617,760	\$1,516,320	\$1,229,950					
Dtr	Productivity lift	\$217,728	\$238,464	\$259,200	\$715,392	\$589,753					
Etr	Technology stack optimization	\$274,050	\$289,350	\$391,500	\$954,900	\$782,408					
·	Total benefits (risk-adjusted)	\$2,289,978	\$2,983,194	\$3,180,330	\$8,453,502	\$6,936,676					

MARGIN FROM IMPROVED REENGAGEMENT

Evidence and data. With Tealium's unified, accessible customer data, marketers used the data downstream to reduce in a timely manner metrics like abandonment. As a result, more customers were reengaged and completed purchases.

Modeling and assumptions. To reflect the interviewees' experiences, Forrester assumes the following for the composite organization:

- The composite establishes a segment of 18.7 million site visits to target reengagement efforts.
- Before Tealium, reengagement rates for this segment were 15.4% successful. After the investment, the success rate increases to 16.4% in Year 1 and 16.7% in Years 2 and 3.
- Of those visits that are successfully reengaged,
 25% convert.
- The average order value is \$400.
- The composite's income margin is 10%.
- Forrester attributes 50% of this benefit to the Tealium investment.

"If a visitor is clicking on the same thing over and over and it's not working, or they are bouncing back and forth between the same two pages, we have an integration with Tealium that says, 'Ben's having a hard time here.' And then I can write rules in Tealium to pop a chat to him or send him a follow-up email or offer him a promotion. We take those opportunities to reduce friction and give customers a better experience."

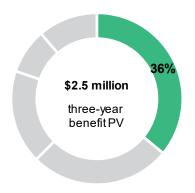
Director of e-commerce, analytics, and tag management, e-commerce retail

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on:

- The size of customer base and breadth of segmentation.
- Segment conversion rates.
- Average order value and income margin.

Readers can adjust the attribution to Tealium figure as appropriate.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$2.5 million.



Març	gin From Improved Reengagement				
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Number of site visits segmented for reen gagement efforts	Composite	18,720,000	18,720,000	18,720,000
A2	Segment reen gagement before Tealium investment	Interviews	15.4%	15.4%	15.4%
A3	Increase in segment reengagement using Tealium	Interviews	6.5%	8.5%	8.5%
A4	Reengagement with Tealium investment (rounded)	A2*(1+A3)	16.4%	16.7%	16.7%
A5	Incremental visits reengaged (rounded)	(A1*A4)-(A1*A2)	187,387	245,045	245,045
A6	Conversion rate of reengaged segment	Composite	25%	25%	25%
A7	Average order value before Tealium in vestment	Interviews	\$400	\$400	\$400
A8	Attribution to Tealium	Assumption	50%	50%	50%
A9	Income margin	Composite	10%	10%	10%
At	Margin from improved retention and reengagement	A5*A7*A8*A9	\$936,000	\$1,216,800	\$1,216,800
	Risk adjustment	↓10%			
Atr	Margin from improved retention and reengagement (risk-adjusted)		\$842,400	\$1,095,120	\$1,095,120
	Three-year total: \$3,032,640	Thi	ree-year present v	value: \$2,493,656	

MARGIN FROM INCREASED PURCHASE SIZE

Evidence and data. After the Tealium CDP investment, the organizations showed relevance by knowing their customers' behavior and experienced lifts in several KPIs by communicating to customers in the moment. In addition to acquiring new customers as quantified in the previous benefit, the interviewees described several ways they measured Tealium's ability to impact revenue:

- More frequent purchases.
- Reduced browse abandonment.
- Reduced conversion abandonment.
- Higher transaction value.
- Higher close and conversion rates.

"With Tealium, we are flexible and can activate the data through other platforms."

Data intelligence manager, financial services

Modeling and assumptions. To reflect the interviewees' experiences, Forrester assumes the following for the composite organization:

- The composite segments 25% of its transaction volume to receive messages for increased sales campaigns.
- The average purchase size before Tealium was \$400. Using Tealium to personalize the customer's experience, the segment's average order value increased by 3% or \$12.
- The composite attributes 50% of revenue growth to the Tealium investment.
- The composite's income margin is 10%.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on:

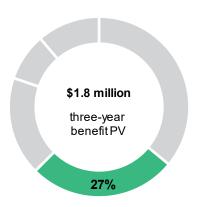
- The size of customer base and breadth of segmentation.
- The average order value and income margin.

Readers can adjust the attribution to Tealium figure as appropriate.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of more than \$1.8 million.

"Our average member tenure is five years and the lifetime value of a member is \$6,200, and that is largely predicated on the fact that there's a lot of switching behavior. So we're always trying to acquire more members, but we would really like to increase the average tenure."

Business intelligence lead, healthcare



Març	gin From Increased Purchase Size				
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Number of transactions segmented for increased sales campaigns	Composite	1,250,000	1,375,000	1,512,500
B2	Average purchase size before Tealium investment	Interviews	\$400	\$400	\$400
В3	Increase in purchase size with Tealium	Interviews	3%	3%	3%
B4	Additional per purchase revenue from better segmentation	B2*B3	\$12.00	\$12.00	\$12.00
B5	Incremental revenue from better segmentation	B1*B4	\$15,000,000	\$16,500,000	\$18,150,000
В6	Attribution to Tealium	Assumption	50%	50%	50%
В7	Income margin	Composite	10%	10%	10%
Bt	Margin from increased purchase size	B5*B6*B7	\$750,000	\$825,000	\$907,500
	Risk adjustment	↓10%			
Btr	Margin from increased purchase size (risk-adjusted)		\$675,000	\$742,500	\$816,750
Three-year total: \$2,234,250 Three-year present value: \$1,840,909					9

MARGIN FROM NEW SALES FROM RIGHT-TIME DATA ACCESS

Evidence and data. A key differentiator for Tealium's CDP that customers emphasized was the speed of the platform. Tealium processes data in real time; when a data payload comes in, it is processed and pushed out to a vendor within milliseconds. This allows organizations to take a customer's action, update the customer record, and provide an action back to the device the customer is using.

- Right-time data personalization drove new revenue. For the interviewed financial services organization, right-time data enabled sales representatives to pick up the phone and call interested parties within minutes, which doubled their frequency of answering the phone. Before Tealium, batch uploads meant that the representatives were calling prospects 24 to 48 hours later, in which case fewer prospects answered the call.
- Personalization improved consumer confidence and drove customer acquisition.
 For the healthcare organization, changing website language to make prospects feel more comfortable encouraged them to complete a purchase. The organization experienced a 22.8% lift in sales as a result.

Modeling and assumptions. To reflect the interviewees' experiences, Forrester assumes the following for the composite organization:

Right-time data access three-year new revenue

\$34 million



- The composite organization relies on Tealium to supply data used for sales representative notifications. When a customer shows interest, a sales rep calls the customer. The composite makes 5,000 outgoing calls per day responding to customer interest.
- In the prior environment, sales representatives acted on stale data, often replying days after the behavior was exhibited. In the prior environment, 30% of calls were answered by a customer.
- With right-time data from Tealium, answer rates improved to 45% in Year 1 and 60% in Years 2 and 3 — an improvement of 150% and 200%, respectively.
- This type of sales call has an average conversion rate of 8%.

"We ran a three-way split test that was personalized for people who had abandoned the sales funnel and came back. We splittest three versions of copy, and the one that won was about confidence in data security. So we told people this site was very secure; everything you share with us is protected. This resulted in a 22.8% lift in sales. Just this small change of copy is responsible for many hundreds of thousands of dollars, and I'm confident that 90%+ of this impact is due to Tealium."

Business intelligence lead, healthcare

ANALYSIS OF BENEFITS

- The average order value is \$400.
- The composite attributes 50% of revenue growth to the Tealium investment.
- The composite's income margin is 10%.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on:

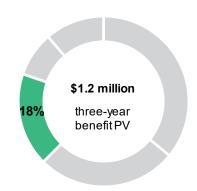
- Use cases for right-time data access will vary.
 Other ways customers might measure Tealium's impact could include recapture rates, reduced cart abandonment, new-customer acquisition, and customer retention.
- This benefit's dollar figure will range given the average order value and income margin.

Readers can adjust the attribution to Tealium figure as appropriate.

"If you abandon a purchase on our website, we will collect information about the page where you left and who you are and route this information to a call center who calls you in seconds. The difference is that if we call a day after, the answer rate is 35%. But if we call in real time, we are going double that rate."

Data intelligence manager, financial services

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of more than \$1.2 million.



Març	Margin From New Sales From Right-Time Data Access										
Ref.	Metric	Source	Year 1	Year 2	Year 3						
C1	Number of sales calls perday responding to customer interest	Composite	5,000	5,500	5,500						
C2	Rate of sales calls accepted before real-time capability	Interviews	30%	30%	30%						
C3	Improvement to answer rate due to real-time data access	Interviews	150%	200%	200%						
C4	Rate of sales calls accepted with Tealium	C2*C3	45%	60%	60%						
C5	Average conversion rate	Composite	8%	8%	8%						
C6	Average order value	Composite	\$400	\$400	\$400						
C7	In cremental revenue from real-time capabilities	(C1*260 days*C4*C5*C6)- (C1*260 days*C2*C5*C6)	\$6,240,000	\$13,728,000	\$13,728,000						
C8	Attribution to Tealium	Assumption	50%	50%	50%						
C9	In come margin	Composite	10%	10%	10%						
Ct	Margin from new sales from right-time data access	C7*C8*C9	\$312,000	\$686,400	\$686,400						
	Risk adjustment	↓10%									
Ctr	Margin from newsales from right-time data access (risk-adjusted)		\$280,800	\$617,760	\$617,760						
Three-year total: \$1,516,320 Three-year present value: \$1,229,950											



PRODUCTIVITY LIFT

Evidence and data. Customers found that the Tealium investment had a positive impact on several business functions including digital advertising, web analytics, and database operations teams. Interviewees shared the following measurements of success:

- Customers automated legacy manual processes. Compared to the prior environment, processes like creating segments were completed in 80% less time, which impacted both the person creating the segments and the downstream teams waiting for the information. By removing bottlenecks due to reliance on technical teams, interviewees saw improved time-to-value for new programs leveraging customer data and could launch more campaigns overall. Marketers were pleased to avoid the laborious and lengthy process of requesting data.
- A unified customer profile led to easier
 management of customer data. In the prior
 environment, every department had a different
 classification of data fields. Tealium helped the
 organizations create a data dictionary to unify
 customer data across the enterprise. With a
 single data set, the organizations easily mapped
 data and sent it to any vendor for downstream
 use and activation.

"With Tealium, we've been able to limit the load on our IT organization — whereas if we did not have it, I think we would have had to add three FTEs."

Business intelligence lead, healthcare

"Before CDP, we had a lot of manual processes and spent a lot of time pushing files around or writing SQL queries to select groups of people. We had lots of endpoints that did their jobs very well, but getting them data and orchestration was a huge challenge. And so, the CDP really helped us with automation and easier processes."

Director of e-commerce, analytics, and tag management, e-commerce retail

Improved data fidelity reduced rework.
 Interviewees noted that with Tealium there was less of a need to manually transform data, and as a result the data was higher in quality. As a result of higher data fidelity, customers experienced fewer downstream errors and avoided related rework.

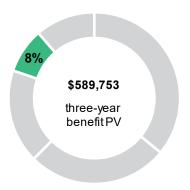
Modeling and assumptions. To reflect the interviewees' experiences, Forrester assumes the following for the composite organization:

- There are 12 employees at the composite organization who are directly impacted by the Tealium investment. These resources span the digital ad team, web analytics, and database operations.
- Through automating manual processes and simplifying integrations, the teams gain 21%, 23%, and 25% in labor efficiencies, or the equivalent of 2.5 to 3.0 FTEs.

- The average fully burdened annual costs of these resources is \$120.000.
- The composite organization realizes an 80% productivity recapture.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on:

- The number of employees and their respective burdened costs with tasks that are impacted by the Tealium investment.
- The operational value that effected resources can add to the organization with their newfound time.



Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of nearly \$590,000.

"Tealium offers an API that we can hit and say, 'Go delete Ben's data.' Boom, you're done.
Tealium is the gatekeeper to our other vendors. If Ben is a do-not-track, Tealium just doesn't give the data to other vendors. We don't have to go to vendors one by one to go shut everybody off."

Director of e-commerce, analytics, and tag management, e-commerce retail

Prod	uctivity Lift				
Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Employees impacted by the Tealium investment	Composite	12	12	12
D2	Labor efficiencies gained through Tealium investment	Interviews	21%	23%	25%
D3	Additional productive FTEs (rounded)	D1*D2	2.52	2.76	3.00
D4	Burdened cost of effected resources	Composite	\$120,000	\$120,000	\$120,000
D5	Productivity recapture	Assumption	80%	80%	80%
Dt	Productivity lift	D3*D4*D5	\$241,920	\$264,960	\$288,000
	Risk adjustment	↓10%			_
Dtr	Productivity lift (risk-adjusted)		\$217,728	\$238,464	\$259,200
	Three-year total: \$715,392	Т	hree-year present v	alue: \$589,753	

TECHNOLOGY STACK OPTIMIZATION

Evidence and data. Tealium's CDP doesn't directly replace legacy tools or solutions, but it does help customers drive technology stack savings in several ways:

- Reduced tech stack maintenance and licensing costs. Customers derived savings from not maintaining and licensing legacy products and integrations as the CDP helped tie together siloed departments and data pipeline use cases.
- Provided consistency and control over data treatment. With Tealium, customers emphasized more ownership of customer data and more control over the tech stack.

"We custom-built our own data warehouse and we were spending time and money to build and maintain an old platform that could not achieve personalization and customer engagement."

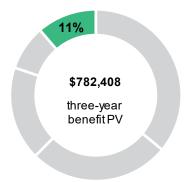
Business intelligence lead, healthcare

Modeling and assumptions. To reflect the interviewees' experiences, Forrester assumes the following for the composite organization:

- The composite avoids manual data preparation, cleaning, and rework costs of \$59,500, \$76,500, and \$85,000 in Years 1, 2, and 3, respectively.
- The composite consolidates legacy licensing and avoids maintenance of integrations of \$245,000 in Years 1 and 2, and \$350,000 in Year 3.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary among organizations depending on the organization's legacy technology stack and integration structures. Readers should consider the lag time for decommissioning or consolidating legacy integrations and may have to delay savings because of contractual requirements.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$782,000.



Techi	Technology Stack Optimization										
Ref.	Metric	Source	Year 1	Year 2	Year 3						
E1	Avoided costs of manual data preparation, cleaning, and rework	Interviews	\$59,500	\$76,500	\$85,000						
E2	Consolidated legacy licensing and integration maintenance	Interviews	\$245,000	\$245,000	\$350,000						
Et	Technology stack optimization	E1+E2	\$304,500	\$321,500	\$435,000						
	Risk adjustment	↓10%									
Etr	Technology stack optimization (risk-adjusted)		\$274,050	\$289,350	\$391,500						
	Three-year total: \$954,900		Three-year presen	t value: \$782,408							

UNQUANTIFIED BENEFITS

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

- Better data visibility led to data governance improvements. Interviewees noted that the improvement to data visibility with Tealium had an impact on compliance efforts. The financial impact of this benefit would be measured by quantifying avoided compliance fines, productivity improvements related to meeting regulations, legal costs, and brand protection from avoiding losing customer data to bad actors.
- Personalization drove better customer
 experience. Three of the five interviewees noted
 that their measurement of customer experience
 improved after the investment in Tealium.
 Although unable to attribute improvements
 directly to Tealium, interviewees believed it
 played a part in the boost. For example, the
 healthcare organization's customer satisfaction
 score (CSAT) rating increased from 54 to 62 over
 the three-year period that they have been using
 Tealium.

"Tealium helps us regarding GDPR [General Data Privacy Regulation]. We appreciate that we know we're covered in terms of how we're tracking data, and we have injected that language into all the site disclaimers."

Business intelligence lead, healthcare

Tealium's Tag Management And Customer Data Platform: Better Together

Throughout the interviews for this study, the interviewed decision-makers often referred to improvements driven by the Tealium Tag Manager tool that they use in addition to CDP capabilities.

Examples shared by the director of e-commerce, analytics, and tag management for an e-commerce retailer included a Tagging team productivity lift. The team responsible for tagging saved 3 hours per month for the tech management team. However, the real impact was less about hours and more about avoiding an aggravating manual task.

Targeting improvements had a positive impact to return on ad spend (ROAS). Some interviewees noted that Tealium contributed to their ability to increase their digital channel advertising and marketing campaigns, which were more cost-effective than the legacy methods. With an increasing move to a cookieless future, Tealium drove better customer targeting, even in the absence of cookies.



FLEXIBILITY

The value of flexibility is unique to each customer.

There are multiple scenarios in which a customer might implement Tealium CDP and later realize additional uses and business opportunities, including:

- The ability to integrate data sources futureproofs the Tealium investment. Tealium has a large catalog of integration connections for incoming and outgoing data, so as business needs change and channels evolve, Tealium users can easily adapt to new data requirements. Interviewees noted that Tealium acts as a data foundation to serve current and future data use cases.
- realium, the interviewee from an electronics company described struggling to connect data across silos with new vendors. When it was possible, it required one to three months of implementation efforts. After the investment, the interviewee noted that they were able to very quickly connect with major players like Salesforce and Google.
- Business stakeholder ownership. With
 Tealium, the organizations were able to
 democratize decisions around how to use
 customer information to the business units rather
 than relying on IT to make those decisions. This
 opened up new use cases and business unit
 specific actions that were previously unavailable.

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

"[Display advertising vendor] is a good example because we implemented them with and without CDP. We were using [display advertising vendor] before with JavaScript tagging, and it was just awful to work with. It was a monthlong project for my techy guys to really get it up and running how we wanted it. And that tag remained fragile. Once we had Tealium CDP, we decided to move it all serverside. We were able to move it in a couple of days, and it's no longer fragile — we just leave it alone and let it do its thing."

Director of e-commerce, analytics, and tag management, e-commerce retail

"Before Tealium, IT used to decide what to do in a website or an app, but after Tealium, the business has the role to manage what we want to measure and activate in our data strategy."

Data intelligence manager, financial services

Analysis Of Costs

Quantified cost data as applied to the composite

Total	Total Costs										
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value				
Ftr	Tealium licensing and services	\$17,250	\$360,755	\$424,465	\$485,300	\$1,287,770	\$1,060,620				
Gtr	Internal implementation, training, and ongoing management labor	\$88,872	\$140,484	\$140,484	\$140,484	\$510,324	\$438,235				
	Total costs (risk-adjusted)	\$106,122	\$501,239	\$564,949	\$625,784	\$1,798,094	\$1,498,855				

TEALIUM LICENSING AND SERVICES

Evidence and data. Customers incurred two external areas of cost paid to Tealium:

 Licensing. Tealium charges for its product based on the volume of data ingested, or "data events."
The number of inbound data sources customers reported ingesting into Tealium ranged from one to 29 depending on use case, technical data structure, industry, and length of time they had been using Tealium.

Licensing figures increased year over year for these organizations as they added data sources and increased their volume of data events.

Organizations derived more intelligence when more end-customer data sources were ingested into Tealium.

Services. With the Tealium investment, customers automatically receive 2 hours per month of break/fix support. Beyond that, customers have the option to purchase additional project-based support services or consulting workshops at the average cost of \$250 per hour per resource. For example, the e-commerce retailer paid an additional \$15,000 for Tealium to provide dedicated onboarding resources and integration assistance.

Modeling and assumptions. To reflect the interviewees' experiences, Forrester assumes the following for the composite organization:

- The composite is a large, mature account in a regulated industry with high volume.
- The composite engages with Tealium for additional implementation services in the initial period.
- Licensing based on data events is \$313,700, \$369,100, and \$422,000 in Years 1, 2, and 3, respectively.

Note: Licensing and services costs are tailored to the composite organization. The best way to estimate licensing and services costs is to speak directly with a Tealium representative.

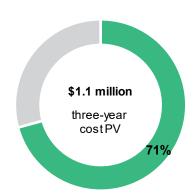
Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on:

- Licensing will vary most significantly due to the number of data events ingested into the platform.
- Varying levels of industry regulations may also impact licensing.
- Some organizations might choose to hire an agency partner for change management, which would incur additional costs. The interviewed

ANALYSIS OF COSTS

decision-makers' organizations did not incur this type of expense.

Results. To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$1.1 million.



Tealiu	Tealium Licensing And Services									
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3				
F1	Tealium licensing and services	Composite	\$15,000	\$313,700	\$369,100	\$422,000				
Ft	Tealium licensing and services	F1	\$15,000	\$313,700	\$369,100	\$422,000				
	Risk adjustment	↑15%								
Ftr	Tealium licensing and services (riskadjusted)		\$17,250	\$360,755	\$424,465	\$485,300				
	Three-year total: \$1,287,770		Three-y	ear present valu	ue: \$1,060,620					



INTERNAL IMPLEMENTATION, TRAINING, AND ONGOING MANAGEMENT LABOR

Evidence and data. Customers incurred three categories of internal labor costs related to their Tealium CDP investment:

- Initial implementation. The implementation
 period for the interviewed customers ranged from
 two to six months, with core teams of three to
 four technical resources who were responsible
 for connecting data channels and aligning with
 stakeholders and business needs. Technical
 resources dedicated between 10% and 100% of
 their time to implementation efforts.
- Ongoing administration. Customers dedicated at least one data management lead and one senior analyst for iterative expansion, testing, insights development and activation. These resources work on secondary implementations, bringing in new data sources and fine-tuning data insights.
- Training. The interviewed customers approached training in several ways. One financial services organization had four full-day sessions for six resources; the healthcare organization trained 24 resources during a two-day onsite training; and the e-commerce retailer was able to train 12 resources in a daylong course. All the interviewed decision-makers relied on resources and assistance from Tealium for training assistance.

Modeling and assumptions. To reflect the interviewees' experiences, Forrester assumes the following for the composite organization:

 The composite has four technical and business resources involved with the initial implementation.
 These resources dedicate 50% of their time over three months to complete the initial Tealium CDP implementation. The average monthly fully burdened cost of these resources is \$10,000.

- Two Tealium administrators spend approximately 50% of their time on ongoing optimization of the platform. Their average annual burdened cost is \$120,000.
- The composite trains 12 business users, data analysts, and marketing users on Tealium during the implementation over the course of four days. As a result of turnover, two new resources receive a three-day training each subsequent year. The average fully burdened hourly cost of these resources is \$45.

Risks. Forrester recognizes that these results may not be representative of all experiences, and the benefit will vary between organizations depending on:

- Implementation length and time required will vary based on scope of the implementation project, the number of integrations, the ability of organizations to prioritize the CDP implementation, and the number of resources dedicated to implementation efforts.
- Organizations that treat the Tealium investment as an ongoing journey and continuously optimize their customer data and find new ways to activate the insights will derive greater financial benefit from the platform. Ongoing optimization requires time and effort, and administrative labor costs will vary by organization.
- Additional costs may be incurred for training depending on delivery mechanism. Additional costs to consider might be travel, lodging, trainer fees and materials, and the opportunity costs of those participating in training.

Results. To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV of \$438,000.

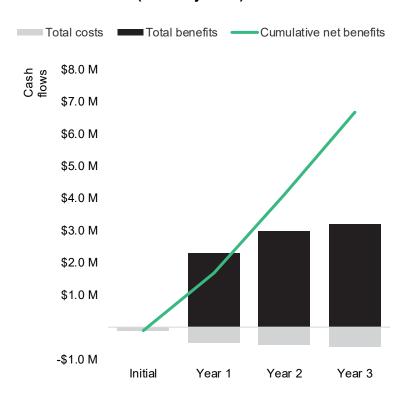


Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
G1	Number of resources involved with initial implementation	Interviews	4			
G2	Months dedicated to implementation	Interviews	3			
G3	Percentage of time dedicated to implementation	Interviews	50%			
G4	Average monthly fully burdened cost of implementation resources (rounded)	\$120,000/12	\$10,000			
G5	Subtotal: internal implementation labor costs	G1*G2*G3*G4	\$60,000			
G6	Tealium ad ministrators	Interviews		2	2	2
G7	Time dedicated to ongoing administration, optimization, and iterations.	Interviews		50%	50%	50%
G8	Average fully burdened cost of administration resources	Composite		\$120,000	\$120,000	\$120,000
G9	Subtotal: ongoing administration	G6*G7*G8	\$0	\$120,000	\$120,000	\$120,000
G10	Number of resources participating in Tealium training	Composite	12	2	2	2
G11	Number of hours of training	Interviews	32	24	24	24
G12	Average hourly fully burdened cost of trained resources (rounded)	\$94,000/2,080	\$45	\$45	\$45	\$45
G13	Subtotal: training costs	G10*G11*G12	\$17,280	\$2,160	\$2,160	\$2,160
Gt	Internal implementation, training, and ongoing management labor	G5+G9+G13	\$77,280	\$122,160	\$122,160	\$122,160
	Risk adjustment	↑15%				
Gtr	Internal implementation, training, and ongoing management labor (risk-adjusted)		\$88,872	\$140,484	\$140,484	\$140,484
Three-year total: \$510,324 Three-year present value: \$438,235						

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 NPV and payback period for the composite organization's investment. For ester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted 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	(\$106,122)	(\$501,239)	(\$564,949)	(\$625,784)	(\$1,798,094)	(\$1,498,855)				
Total benefits	\$0	\$2,289,978	\$2,983,194	\$3,180,330	\$8,453,502	\$6,936,676				
Net benefits	(\$106,122)	\$1,788,739	\$2,418,245	\$2,554,546	\$6,655,408	\$5,437,821				
Payback (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 Sources are calculated for each total cost and benefit estimate. NPV Sources in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value Sources of the Total Benefits, Total Costs, and Cash Flowtables 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.



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: Supplemental Material

Related Forrester Research

"The Forrester New Wave: B2B Customer Data Platforms, Q2 2019," Forrester Research, Inc., June 17, 2019

"New Tech: B2B Marketing Data Management Solutions, Q1 2019," Forrester Research, Inc., January 31, 2019

Appendix C: 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.

² Source: Forrester Analytics Global Business Technographics® Marketing Survey, 2021.

