

FORRESTER®

# The Total Economic Impact™ Of FullStory's Digital Experience Intelligence (DXI) Platform

Cost Savings And Business Benefits  
Enabled By The DXI Platform

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## ABOUT FORRESTER CONSULTING

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

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## Executive Summary

Today's consumers expect a seamless digital experience customized to their personal interests across web and mobile platforms. Companies must understand their online interactions and eliminate online points of friction for customers to optimize quality and unlock value. FullStory delivers data and insights in near real time to help companies make faster, smarter decisions on design and technical remediation, driving top-line revenue, cross-functional productivity gains, and improved customer satisfaction.

### FullStory Digital Experience Intelligence (DXI)

platform offers companies a data-centric analytic solution that gives end-to-end insights on the performance and effectiveness of their digital platforms. FullStory's technology automatically captures and indexes every user event including mouse clicks, scrolling, and error messages. Through the available dashboards, metrics, and search capabilities of the FullStory DXI platform, companies can better understand exactly how consumers are interacting with their websites and mobile apps to engineer a better experience and flow for consumers while addressing technical issues more quickly. Moreover, FullStory's simple UI enables broad adoption of its capabilities for cross-functional users, leading to streamlined processes and decision-making.

Improved profit margin from customer conversions:

**\$6.8 million**



FullStory commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying the Digital Experience Intelligence platform.<sup>1</sup> The purpose of this

### KEY STATISTICS



Return on investment (ROI)

**451%**



Net present value (NPV)

**\$6.90M**

study is to provide readers with a framework to evaluate the potential financial impact of the FullStory DXI platform on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four representatives with experience using FullStory. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single [composite organization](#) that is an omnichannel business that generates annual revenues of \$3 billion across North America and Europe.

Prior to using the FullStory DXI platform, these interviewees noted how their organizations employed a combination of traditional analytics and homegrown solutions as well as more mature digital experience analysis tools to manage their websites and mobile apps. Previous solutions were disjointed and inefficient, which encumbered the decision-making process. Legacy tools also lacked mobile capabilities

and limited interviewees' ability to improve the omnichannel experience. This led to missed opportunities for customer conversions for those companies.

After the shift to the FullStory DXI platform, organizations gained increased visibility into and more complete analytics on the end-to-end customer journey as they leveraged autocaptured UX data and session replays in near real time. Companies realized revenue gains as they optimized the digital experience and removed points of frustration for consumers. With improved business agility, organizations were able to deploy new features and technical fixes significantly faster than with previous solutions. Operational efficiency gains allowed organizations to redeploy resources to higher-value tasks while providing a single source of truth for decision-making cross-functionally.

**“Don’t build software without [FullStory]. You want to have all the data to back every decision you are making, be able to tell the story compellingly, and spend zero time maintaining and setting it up. FullStory is the only tool that does all of that, and it works across every platform down to native apps.”**

*Senior vice president, IT and logistics*

## KEY FINDINGS

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

- **Increased customer conversions by \$6.8 million over three years.** The FullStory DXI platform’s simple UI and insights allow for quicker throughput on design and feature delivery for the composite organization. With near real time analytics, session replay, and data, the organization can quickly address technical issues and resolve points of friction to improve the customer experience. Overall, the composite improves time to value for feature design and issue resolution for bugs by five times compared to their previous solution.
- **Increased productivity leading to \$511,000 in gains.** FullStory enables the composite organization to improve collaboration across operational teams with greater usability and insights. Increased adoption and an established source of truth for teams lead to quicker and smarter decision-making. By streamlining processes and eliminating manual tasks, the composite sees a 15% to 25% gain in productivity for design, product, and technical teams compared to previous solutions.
- **Preserved revenue with 4,000 fewer fraudulent events each year.** Security operations teams can use analytics and data through the FullStory DXI platform to identify suspicious customer behaviors and patterns. FullStory’s features allow the composite organization to better understand potential malicious orders or to retroactively audit prior behavior. By mitigating 10% of annual fraud incidents, the composite preserves \$669,000 in revenue over three years.
- **Gained \$441,000 from technology stack consolidations.** Through FullStory’s easy-to-use interface, improved insights, and unified

capabilities, the composite organization reevaluates and enhances their digital experience and analytics toolset. This leads to savings from decommissioning or downgrading elements of their previous solution, driving a three-year present value benefit of \$441,000.

**“FullStory is incredibly important to have as you’re doing a good transformation to be able to model what is and isn’t working while helping you make decisions as you go.”**

*Senior vice president, IT and logistics*

**Flexibility benefits.** Supplemental value enabled by longer-term added investments or additional nearer-term investments and scenarios that are not factored into the composite organization analysis include:

- **Increased site traffic and engagement.** By optimizing the content and reducing friction across digital platforms with FullStory, B2C and B2B companies can realize an improvement in how customers interact with their sites. Through increased time and engagement on the platform, organizations may see increased overall site traffic and improved customer retention that leads to increased top-line revenue.
- **Digitally influenced revenue and customer experience across sales channels.** The analytics and knowledge gained through FullStory can be used to better understand customer behavior at a holistic level to improve sales and customer experiences outside of online platforms. Companies can leverage the app to

better anticipate consumer needs in store and office settings to improve product offerings and service.

- **Decreased legal and compliance risk.** The FullStory DXI platform allows companies to systematically exclude sensitive data when configuring their sites to limit potential risk by not unnecessarily capturing or exposing personally identifiable information (PII) for customers. Rather than taking screenshots or recordings that can leave end-user privacy at risk, FullStory captures a webpage or app’s structure at the code level and uses that information to re-create sessions.

**“FullStory really is at the forefront, and their simple interface has created a super self-service tool that democratizes experiential data.”**

*Senior director, retail*

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

- **Improved site performance compared to legacy solutions.** Companies can deploy the FullStory DXI platform with negligible to no performance impact on web and mobile experiences. By comparison, previous solutions’ tagging and code slowed or interrupted users.
- **Five percent improvement in Net Promoter Scores<sup>SM</sup> (NPS) and customer satisfaction.<sup>2</sup>** Companies can leverage the FullStory DXI platform to address error messages and points of frustration leading to fewer complaints and happier customers. With improved design and

reduced friction, companies saw improved overall customer satisfaction and NPS scores.

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

- **Three-year software license fees of \$1.4 million.** FullStory licensing is dependent on a number of factors including annual web sessions, number of users, and the level of support. On an annual basis, the composite organization pays \$550,000 in licensing costs.
- **Implementation, design, and maintenance costs of \$91,000.** The composite organization utilizes a five-person planning and implementation team over two months to integrate, configure, and deploy the FullStory DXI platform. Ongoing maintenance and enhancements require 10% of the time of two IT engineers throughout the three-year investment in FullStory.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$8.42 million over three years versus costs of \$1.53 million, adding up to a net present value (NPV) of \$6.90 million and an ROI of 451%.



ROI  
**451%**



BENEFITS PV  
**\$8.42M**



NPV  
**\$6.90M**

### Benefits (Three-Year)

Improved customer conversions

\$6.8M

Other benefits for eliminated current point solutions, productivity gains, and mitigating risk

\$1.6M

**“FullStory makes it so easy that it’s helped me to make the investment on design and build a world-class experience for our customers.”**

— Senior vice president, IT and logistics

## 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 the FullStory Digital Experience Intelligence platform.

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 the FullStory DXI platform can have on an organization.

### DISCLOSURES

Readers should be aware of the following:

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

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the study to determine the appropriateness of an investment in the FullStory Digital Experience Intelligence platform.

FullStory 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.

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



### DUE DILIGENCE

Interviewed FullStory stakeholders and Forrester analysts to gather data relative to Digital Experience Intelligence.



### INTERVIEWS

Interviewed four representatives at organizations using FullStory's Digital Experience Intelligence platform to obtain data with respect to costs, benefits, and risks.



### COMPOSITE ORGANIZATION

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



### FINANCIAL MODEL FRAMEWORK

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



### CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.



# The FullStory DXI Platform Customer Journey

■ Drivers leading to the Digital Experience Intelligence platform investment

Interviews			
Role	Industry	Region	Annual Revenue
Senior director	Retail	North America	\$10 billion to \$100 billion
Senior vice president	IT and logistics	Global	\$100 million to \$500 million
Product manager	Food and beverage	Australia	\$1 billion to \$10 billion
User experience manager	Energy	EMEA	\$1 billion to \$10 billion

## KEY CHALLENGES

Prior to implementing the FullStory DXI platform, interviewees representing a wide range of globally distributed companies with varying business models leveraged a combination of more mature digital experience analysis solutions, traditional web analytics, and homegrown tools to analyze their online experience. Although their organizations' operations, industries, and long-term digital strategies varied, representatives' companies shared an increasing focus on web and mobile customer interactions and struggled with common challenges, including:

- **Friction in digital customer experience negatively impacted revenue.** Interviewees discussed how their prior solutions' ability to address web design issues, rage clicks (rapid, repeated clicking), and other technical issues were inadequate as their digital presence became more integral to their customer experience and ultimately top-line revenues. The senior vice president in IT and logistics commented: "We had no visibility into why we weren't retaining [customers]. We couldn't even tell you which customers [were leaving] or why."

**"The self-service nature of the tool means that we can have a larger user base getting more insights out of FullStory on a more real-time basis."**

*Senior director, retail*

- **Manual tagging limited solutions' effectiveness and opened companies to risk.** Traditional and digital experience analytics tools previously deployed by interviewees required extensive manual tagging reliant on masking sensitive information and reactive to customer complaints and feedback. This left companies at risk of exposing PII for customers and impacting their overall brand while restricting what their teams could execute on. The senior vice president in IT and logistics commented: "We had session [replay], but it was a little like dragging the user through their interface. The amount of effort in manually tagging and installing to run session [replay] properly on the tool was not really usable."

**“FullStory has been built as an agile tool. You can very clearly see where the issues are and very quickly change what your initiatives need to be, what bugs you need to fix, [and] what is highest priority. I see where our maximum ROI opportunities are and pivot as soon as possible.”**

*Product manager, food and beverage*

- **Lack of mobile capabilities limited omnichannel conversions.** Interviewees shared how their companies lacked visibility into their mobile platforms with their previous solutions. Without a tool that could seamlessly bridge the gap between web and mobile UX, companies were unable to efficiently evaluate the effectiveness of design campaigns and functionality, which led to lost customer conversions. The senior director in retail discussed the impact on his company: “We had no visibility or analytics into our native mobile apps. Mobile is increasingly becoming a huge channel of traffic and conversion, [and] therein net demand for the company. We were flying blind in something that was growing to over 10% of our digital channel.”
- **Disjointed technology solutions and analytics toolsets created inefficiencies.** Users at interviewees’ companies struggled with long lead times on technical and design processes and difficulty building internal consensus with several analytical tools for decision-making. Solutions were aimed at specific user groups across user experience, product management, and

technology teams, extending time to value for design efforts and technical resolution of issues.

The senior director at a retail organization elaborated on the steep learning curve for their previous digital experience analytics platform and their dependency on their prior vendor: “The old UX was not user-friendly, and so our self-service ability was low. In fact, we needed a representative of [the prior vendor] 100% dedicated to our account.”

**“You spend very little time training, and the time to value for any average user is extremely low. I won’t go to another company if I can’t buy FullStory.”**

*Senior vice president, IT and logistics*

## INVESTMENT OBJECTIVES

The interviewees’ organizations searched for a solution that could:

- Provide a unified digital experience analytics platform that enables cross-functional collaboration and improves overall throughput.
- Drive traffic and improved conversions across digital platforms.
- Improve customer experience through optimized content while reducing frustration metrics including rage clicks and dead clicks that to error messages and dead ends for customers.

During the request for proposal (RFP) and business case process evaluating multiple vendors, the interviewees chose the FullStory DXI platform based

on its capabilities and the immediate impact on their organizations:

- The FullStory DXI platform's ease of use and capabilities led to immediate value for interviewees. The senior director in retail shared: "FullStory quickly became a favorite of our users. It's not flashy, but that's how it excels. You can get into the platform with simple terminology and logic statements and start to get dirty. I would argue that I could give anyone in the organization a login, and they can go in and find something."
- The FullStory DXI platform improved site performance, with essentially no latency or clocking for users during their web journey.
- Risk mitigation through FullStory capabilities limited fraud and legal issues.

### COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the four interviewees, and it is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

**Description of composite.** The omnichannel business supports several brands and maintains a high stock-keeping unit (SKU) count of product offerings across its retail and digital operations. The composite organization is headquartered in North America with operations throughout Europe. The company generates \$3 billion in annual revenue supported by 25,000 employees globally, including 10 user experience designers, 50 product managers, and a team of 15 IT commerce support employees.

**Deployment characteristics.** Following a short proof of concept (POC) during the RFP process, the composite organization launches the FullStory DXI platform over a two-month period primarily dedicated to internal planning. FullStory is deployed after a

short period for technical configuration and is implemented on the company's digital platform across all brand offerings. FullStory captures and supports 100% of the organization's 100 million user sessions across web and mobile experiences.

#### Key Assumptions

- **\$3 billion revenue**
- **Omnichannel business**
- **25,000 employees**
- **100 million annual customer sessions now captured with FullStory**

### Customer Voices

"Our information security team uses FullStory to spot bad actors and look at bad actor activity and patterns to understand how to better monitor and spot them. Our digital engineering teams [use it] for bug bashing and things like that. Our product management teams [use it] for everything from bug bashing to heat maps and trying to understand trends or how the customer is interacting with interfaces. All four of our brand teams are active users, mostly their merchandising and digital production teams, for the high-level analytics of seeing click maps and scroll maps. And then our testing, COE, and digital marketing teams as well. So we have pretty much anyone in the organization outside of supply chain and finance using FullStory."

*Senior director, retail*

# Analysis Of Benefits

■ Quantified benefit data as applied to the composite

Total Benefits						
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Improved customer conversions	\$2,304,000	\$2,764,800	\$3,225,600	\$8,294,400	\$6,802,945
Btr	Eliminated cost of current point solutions	\$135,000	\$180,000	\$225,000	\$540,000	\$440,533
Ctr	Improved operational productivity	\$164,156	\$208,383	\$252,610	\$625,150	\$511,240
Dtr	Mitigating risk to preserve revenue	\$252,000	\$270,000	\$288,000	\$810,000	\$668,610
	Total benefits (risk-adjusted)	\$2,855,156	\$3,423,183	\$3,991,210	\$10,269,550	\$8,423,328

## IMPROVED CUSTOMER CONVERSIONS

**Evidence and data.** FullStory delivered enhanced analytical capabilities by automatically capturing and indexing all customer events from the moment they interact with a site. Utilizing end-to-end visibility into key metrics, insights into how customers are using site features, and a deeper understanding of customer behaviors enabled companies to react quicker to customer issues and improve clickthrough rates. Interviewees discussed how their cross-functional teams were able to improve speed to value for new feature delivery, site design changes, and technical fixes compared to previous solutions. Ultimately, companies saw improvements in customer conversions and retention with increased customer engagement across their web and mobile platforms.

- Representatives discussed how the ease of use of FullStory’s UI helped employees better understand their customers’ experience when shopping and buying, and influence decisions for feature releases and design. The user experience manager in the food and beverage industry shared: “We use FullStory to track and measure [design] success. We make sure that things are working in the way that they’re

supposed to on the correct devices. We use it as a [Quality Assurance] QA tool, a usability tool, and it helps influence what we do next.”

- The FullStory DXI platform features for session replay and supporting analytics for every customer event gave interviewees more comprehensive information compared to legacy solutions. Additionally, data and insights were available to users in near real-time which led to quicker throughput on iterative design and testing.

**“Without FullStory, we would have no visual element where we can follow the journey of the customer. We’re able to pinpoint information more quickly and compare data over time. We know almost in real time if we’ve got any problems and they can be sent through to support.”**

*User experience manager, energy*

- The senior director in retail discussed how FullStory helped improve resolution for technical issues for their company: “When users start experiencing problems overnight on the website, we catch them now at 7 a.m. because enough of that trend data has started to pull up, and we can nip it in the bud before our massive customer traffic comes on. Whereas with [our previous solution], we didn’t actually understand that trend until customers started calling it out, which might not happen until 9 a.m.”

He continued on how the FullStory DXI platform helped this team react more quickly to trends in customer behavior and code bugs: “We can come in fresh in the morning and already see a bad trend starting to build — we can take care of it more quickly. Which means it has a much shorter tail, driving our increase in overall customer satisfaction and our decrease in customer comments. FullStory allows us to be proactive about issue resolution because we’re catching it before more customers get online to start shopping.”

increase in customer conversion rate over three years.

**“One of the North Stars of my teams is to create a frictionless experience, and FullStory 100% helps us get there. A frictionless experience will keep [customers] coming back and increase lifetime value.”**

*Senior director, retail*

**Modeling and assumptions.** To reflect the interviewees’ experiences, Forrester assumes the following about the composite organization:

- The composite organization has 100 million annual site visits across its digital platforms. The company converts 9% of visits to sales at an average order value of \$80 prior to its investment in the FullStory DXI platform.
- After deployment of FullStory, the composite sees an immediate 5% lift in conversion rate to 9.45%, which increases incrementally through the third year of the investment as its internal team becomes more proficient on the tool.
- Net profit margin is assumed at 8% for the composite.

**Flexibility.** Forrester traditionally views flexibility benefits as future supplemental value enabled by longer-term added investments. Flexibility can also be applied to nearer-term and alternative scenarios by considering the potential of investment decisions beyond a benefit’s financial measurement, providing relevancy to readers.

Increased speed of tech decisions and feature design:

**5x**



- Companies reported being able to make decisions on site features and resolve technical issues for site bugs and errors five times faster than previous solutions
- With smarter and faster capabilities, interviewees’ companies significantly improved conversion rates, with one company more than doubling its rates since deploying the FullStory DXI platform. Overall, the composite organization saw a 7%

- Beyond B2C customer conversions, some interviewees were able to increase site engagement for B2B customers, enabling value through improved site design. The senior vice president in IT and logistics discussed: “Customers are telling us qualitatively [the platform is] great, but knowing they’re actually spending time with the platform — that our retention rates went from 20% to 65% on the new platform — is really impressive. [We’re] able to model that in FullStory to say here’s why we’re succeeding, and that brings confidence to the whole organization.”
- Improved insights and decision-making from the FullStory DXI platform can also help improve decisions that lead to increased traffic across channels. The product manager in the food and beverage industry discussed the impact on their company: “Active users were at around 200K, and over the two years, now we’re averaging

around 1 million users per month. I think that’s a very significant increase.”

**Risks.** Several factors may affect the organization’s experience, including the following:

- The industry, focus, and relative size of the company.
- The previous solutions deployed, which impacts the magnitude of impacts gained by utilizing the FullStory DXI platform.
- The baseline customer conversion rate and profit margin of the company.
- The relative size and skill set of the internal teams using the FullStory DXI platform.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of more than \$6.8 million.

Improved Customer Conversions					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Total site visits	Composite	100,000,000	100,000,000	100,000,000
A2	Conversion rate prior to FullStory	Interviews	9%	9%	9%
A3	Average order value	Composite	\$80	\$80	\$80
A4	Revenue from site conversion	$A1 \times A2 \times A3$	\$720,000,000	\$720,000,000	\$720,000,000
A5	Increase in conversion rate with FullStory	Interviews	5%	6%	7%
A6	Conversion rate after FullStory	$A4 \times (1 + A5)$	9.45%	9.54%	9.63%
A7	Net product margin	TEI standard	8%	8%	8%
At	Improved customer conversions	$A4 \times A5 \times A7$	\$2,880,000	\$3,456,000	\$4,032,000
	Risk adjustment	↓20%			
Atr	Improved customer conversions (risk-adjusted)		\$2,304,000	\$2,764,800	\$3,225,600
<b>Three-year total: \$8,294,400</b>			<b>Three-year present value: \$6,802,945</b>		

## ELIMINATED COST OF CURRENT POINT SOLUTIONS

**Evidence and data.** After implementing the FullStory DXI platform, companies reevaluated their technology stacks based on their investment. Interviewed representatives described how, almost immediately after deployment, their companies were able to decommission or downgrade their traditional analytics and digital experience tools based on increased insights, cross-functional applications for internal teams, and comprehensive data gained from FullStory.

- Interviewees reported that the capabilities, data, and reporting available through the FullStory DXI platform helped to replace and enhance what their organizations were seeing with legacy solutions. While each organization saw different impacts, most companies were able to retire at least one legacy system based on their investment.
- The senior vice president in IT and logistics discussed the impact of transitioning away from prior solutions for their company: “Our ability to migrate off of old platforms will save us in hosting, management, and engineering costs. It’s millions a year.”
- Interviewees’ organizations were able to see a significant savings in technology spend once the FullStory DXI platform was fully implemented. One interviewee’s company was able to realize \$1 million in annual savings by retiring legacy solutions based on its investment in FullStory.

**Modeling and assumptions.** For the financial analysis, Forrester assumes that the composite organization decreases investment in legacy analytical solutions by \$150,000 in the first year after deployment. As internal users become more proficient with the tool and expand its usage and reporting, and more legacy systems can be reduced

or retired, savings increase to \$250,000 by the third year.

**“Having different analytics tools and different acquisitions being unified with FullStory is a big benefit, so you have one reporting system.”**

*Senior vice president, IT and logistics*

**Flexibility.** Forrester views flexibility benefits as future supplemental value enabled by longer-term added investments or nearer-term scenarios by considering the potential of investment decisions beyond a benefit’s financial measurement:

- After the initial three-year investment in the FullStory DXI platform, companies may be able to see further technology stack consolidation as new features are released and the organization expands its internal user base. The senior vice president in IT and logistics shared: “That’s the biggest area that I’m optimistic for [with] FullStory. If you can expand its quantitative metrics, we will get to a point where we are able to save another six-figure payment per year [from retiring legacy tools].”
- Outside of technology stack consolidation, interviewees saw the potential to improve their analytics and insights across connected platforms at their companies based on their investment in FullStory. The user experience manager in energy shared: “I’d like to have a connected analytics front. I want to be able to pinpoint what customers are doing at every step in the journey, and I want a connected vision of

all our analytics platforms together, so we can start to understand our customers more and make the best products possible. I think FullStory is something that will be able to help with that [vision].”

- The product manager in food and beverage discussed how their company had integrated the FullStory DXI platform within the technology stack to improve other tools and drive operational efficiencies downstream: “We’ve set up some alerts if people are rage-clicking. What we’ve done is if people are rage-clicking on buttons too much within the website, then it means something is broken, something is wrong. That alert comes through on [our issue-tracking

solution], so we don’t have to keep going into the tool and seeing what’s happening.”

**Risks.** The total eliminated cost of current point solutions benefit will vary based on the following:

- The existing analytical capabilities of the organization before implementing the FullStory DXI platform.
- The number of legacy tools.
- The cost of the legacy tools.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$441,000.

### Eliminated Cost Of Current Point Solutions

Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Eliminated cost of current point solutions	Interviews	\$150,000	\$200,000	\$250,000
Bt	Eliminated cost of current point solutions	B1	\$150,000	\$200,000	\$250,000
	Risk adjustment	↓10%			
Btr	Eliminated cost of current point solutions (risk-adjusted)		\$135,000	\$180,000	\$225,000
<b>Three-year total: \$540,000</b>			<b>Three-year present value: \$440,533</b>		



## IMPROVED OPERATIONAL PRODUCTIVITY

**Evidence and data.** Increased usability, quicker time to value, and deeper insights across web and mobile platforms led to operational gains and smarter decision-making. Interviewees discussed how their companies were able to leverage the FullStory DXI platform capabilities and reporting to eliminate manual tasks, like tagging data, allowing teams to concentrate on core tasks. With a combination of collaborative tools and comprehensive site event data, representatives saw increased adoption of the tool compared to prior solutions as teams leveraged FullStory as a single source of truth helping to streamline processes.

- The user experience manager in energy shared how FullStory is helping their company become more efficient internally through visibility into every step of the digital customer journey. They shared: “FullStory has helped us work a lot quicker. We know what sort of information we want to be tracking. We know what’s important. We know what our core journeys and our key funnels are, so we can be managing and tracking that over time. We also know when we have released new functionality, how we can monitor it, and then take the metrics from the before and the metrics from the after to prove that we’ve created better solutions.”
- After deploying the FullStory DXI platform, interviewees’ companies saw a 15% to 25% improvement in productivity for user experience, product, technical, and other cross-functional teams. These productivity gains led to savings as high as \$1.4 million annually for interviewees’ companies.

**Modeling and assumptions.** For the financial analysis, Forrester assumes:

- The composite organization utilizes teams of 10 user experience designers, 25% of the time of 50 product managers, and 25% of the time of 15 IT

commerce support employees to manage its digital platforms across web and mobile.

- With the investment in the FullStory DXI platform, the composite sees a 10% to 15% improvement in the performance across teams in the first year, with subsequent gains in Years 2 and 3.
- The average fully burdened salaries for impacted teams \$105,000 for user experience managers, \$129,000 for product managers, and \$120,000 for IT commerce support staff.
- The productivity recapture rate for efficiency gains is assumed to be 50% for the composite organization, as not all recaptured time will be repurposed for value-adding work.

**“A huge factor for our engineering teams in terms of making their productivity quicker is that FullStory captures all of the data. They can get data points from sessions that [our previous vendor solution] didn’t capture, which makes reproducibility much quicker.”**

*Senior director, retail*

**Flexibility.** Companies could see long-term benefits and increased adoption of the FullStory DXI platform’s capabilities to drive incremental operation efficiencies beyond the three-year period modeled with the composite organization. Interviewees shared that their companies were continuing to expand their internal user base as FullStory innovates and adds new features within FullStory. The senior vice president in IT and logistics shared their perspective:

“I see us continuing to invest, using FullStory to be core business reporting metrics for our organization. More and more teams are going to use FullStory to report out how they are and aren’t performing.”

**Risks.** The value of this benefit may vary in other organizations based on the following:

- The organization’s relative size, customer base, industry, and location of operations.
- The relative maturity of the company’s digital platforms and the strength of the previous

solutions deployed internally.

- The skill level, efficiency, and salaries of the employees within the organization utilizing the FullStory DXI platform.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of more than \$511,000.

Improved Operational Productivity					
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Number of user experience designers	Composite	10	10	10
C2	User experience designer fully loaded annual salary	TEI standard	\$105,000	\$105,000	\$105,000
C3	Improved productivity with FullStory	Interviews	15%	20%	25%
C4	Subtotal: Improved user experience designer productivity	$C1 * C2 * C3$	\$157,500	\$210,000	\$262,500
C5	Number of product managers	Interviews	50	50	50
C6	Time spent on online product management	Interviews	25%	25%	25%
C7	Product manager fully loaded annual salary	Interviews	\$129,000	\$129,000	\$129,000
C8	Improved productivity with FullStory	Interviews	10%	13%	15%
C9	Subtotal: Improved product manager productivity	$C5 * C6 * C7 * C8$	\$161,250	\$201,563	\$241,875
C10	Number of IT commerce support employees	Interviews	15	15	15
C11	Time spent on IT design and issue resolution	Interviews	25%	25%	25%
C12	IT commerce support fully loaded annual salary	Interviews	\$120,000	\$120,000	\$120,000
C13	Improved productivity with FullStory	Interviews	15%	18%	20%
C14	Subtotal: IT commerce support productivity	$C10 * C11 * C12 * C13$	\$67,500	\$78,750	\$90,000
C15	Productivity recapture rate	TEI standard	50%	50%	50%
Ct	Improved operational productivity	$(C4 + C9 + C14) * C15$	\$193,125	\$245,157	\$297,188
	Risk adjustment	↓15%			
Ctr	Improved operational productivity (risk-adjusted)		\$164,156	\$208,383	\$252,610
<b>Three-year total: \$625,150</b>			<b>Three-year present value: \$511,240</b>		

**MITIGATING RISK TO PRESERVE REVENUE**

**Evidence and data.** Organizations were able to better identify and address malicious orders and fraud incidents by utilizing the FullStory DXI platform’s capabilities for session replay, diagnostic tools, and access to coding as well as supporting data, and analytic reporting. Interviewees discussed how technical teams for their companies got a more comprehensive picture of potential issues as well as the ability to quickly recreate patterns for bad actors and remediate system issues. Ultimately, FullStory helped companies mitigate fraud losses and preserve revenue across their digital platforms.

- Interviewees discussed how their teams used FullStory to analyze the consumer behaviors based on their customer journeys to quickly isolate suspicious patterns and establish rules to prevent malicious incidents. By utilizing diagnostic tools and more comprehensive data within FullStory, security operations teams were able to identify and remediate incidents more quickly than with previous solutions.
- The senior director in retail shared how FullStory was helping their security team identify bad actors and prevent lost revenue for their company. They said: “Our InfoSec team is going into [FullStory] and looking at the behavior and the patterns. You can create really clear click patterns that bots around the world are being programmed to do. The real value has come in being able to see the experiential trend that the bad actors are using so that we can block that flow.”

- Through automatically capturing data and user events, FullStory provided a new tool for information security teams to retrospectively audit and address potential fraud incidents compared to previous solutions, which were reliant on manual instrumentation. One representative reported that their organization was about to identify and address an issue that had cost the company \$300,000 annually for the previous seven years.

**“We were getting at least four [significant] malicious orders per day, and now we’ve reduced it to zero with FullStory.”**

*Product manager, food and beverage*

**Modeling and assumptions.** To reflect the interviewees’ experiences, Forrester assumes the following about the composite organization:

- The composite organization sees a decrease of 10% in fraudulent events helping prevent or \$300,000 in lost revenue annually.
- The composite organization is able to avoid 3,500 fraudulent incidents in the first year after investing in the FullStory DXI platform, with subsequent gains in Years 2 and 3 as the security operations team becomes more proficient with the tool.
- The analysis assumes an average order value of \$80 for each fraudulent incident.

**Flexibility.** Some flexibility benefits may apply to organizations that are faced with scenarios that were not factored into the financial modeling for the composite organization. For example:

Decrease in fraudulent events on digital platform:

**10%**



- Companies can leverage the FullStory DXI platform to improve risk mitigation. Interviewees shared how FullStory’s robust privacy settings led to decreased legal and compliance concerns by not capturing or exposing PII for their customers. By not obtaining this data upfront, companies can avoid large incidents that expose them to negatively impacted brand equity and adverse legal events.
- Companies can mitigate and better manage data loss incidents that could occur as a result of changes to code or platform features. The senior director in retail described how the ability to unmask data via automation helped mitigate risk and save important data for his company: “It is such a breath of fresh air because we don’t have to worry about changing code or producing a new feature or functionality. I don’t lose any of the underlying data because of unmasked issues.”
- The product manager in the food and beverage industry explained the added benefit of the FullStory DXI platform capabilities relative to meeting compliance rules for their company. They noted: “FullStory doesn’t really capture your screen — it captures the back end that creates the screen. From a privacy point of view, that was quite important for us, with all of the laws that are now changing, just capturing screenshots of the actual screen and making a video out of it becomes a problem. We were quite happy with

that mechanism.”

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

- The organization’s relative size, customer base, industry, and its global footprint for digital operations.
- The baseline security strength, exposure, and posture of the organization’s digital platform.
- The skill set of the organization’s security team.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of nearly \$669,000.

**“With FullStory, I feel much more confident that I don’t have a single piece of user data that I don’t want on my platform, which would increase the overall liability risk to the organization.”**

*Senior director, retail*

Mitigating Risk To Preserve Revenue					
Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Number of fraudulent incidents avoided with FullStory	Interviews	3,500	3,750	4,000
D2	Average order value	Composite	\$80	\$80	\$80
Dt	Mitigating risk to preserve revenue	D1*D2	\$280,000	\$300,000	\$320,000
	Risk adjustment	↓10%			
Dtr	Mitigating risk to preserve revenue (risk-adjusted)		\$252,000	\$270,000	\$288,000
<b>Three-year total: \$810,000</b>			<b>Three-year present value: \$668,610</b>		

## UNQUANTIFIED BENEFITS

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

- **Improved website and mobile performance.** Representatives talked about how their previous digital experience analytics toolsets were slowing down their web and mobile sites. Companies saw an improvement in site performance after implementing FullStory compared to their prior solutions.  
  
The senior director in retail shared: “We have seen across both our desktop mobile website and our native mobile app that FullStory has had negligible to no performance impact, and notably for the native mobile app, negligible to no battery impact on the device. What we’re able to capture without interrupting the user’s experience is super paramount, and the [previous solution’s] tag was sizably heavier than FullStory and was actually slowing down the user in their web journey.”
- **Improved customer satisfaction and engagement.** Organizations can improve the customer experience through the FullStory DXI platform by reducing engagement friction and consumer frustration. The product manager in the food and beverage industry shared: “One of the things that we saw was with error messages that not only improved your conversion rate but overall satisfaction of clients as well. We saw [that] when the frustration metrics reduced, the satisfaction scores overall increased as well.”
- **Increased NPS scores.** Through reduction of friction and improved site flow and design across web and mobile sites, interviewees saw an average decrease in customer complaints of 20%. This led to an improvement of 5% in customer satisfaction and NPS scores.

Decrease in digital customer complaints:



## FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement FullStory’s Digital Experience Intelligence platform and later realize additional uses and business opportunities, including:

- **Top-line revenue growth and improved customer experience outside of digital platforms.** Companies could positively influence the in-person experience by leverage customer insights and data from FullStory to optimize product offerings, layout, and support. One interviewee shared how they were using the FullStory DXI platform in brick-and-mortar locations to better understand individual customer behavior and influence strategy at their retail locations. This could help increase average customer order value and overall revenue as well as satisfaction rises for employees and customers alike.
- **Partnership and support.** Each of the interviewees shared having a great experience with the end-to-end support from FullStory’s internal team. The senior director in retail shared: “The responsiveness that I get from their customer support, from my account exec team, and even from the CEO directly, it is always super genuine, super transparent, and super quick.”

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

# Analysis Of Costs

■ Quantified cost data as applied to the composite

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Software license fees	\$0	\$577,500	\$577,500	\$577,500	\$1,732,500	\$1,436,157
Ftr	Implementation, design, and maintenance costs	\$22,617	\$27,600	\$27,600	\$27,600	\$105,417	\$91,254
	Total costs (risk-adjusted)	\$22,617	\$605,100	\$605,100	\$605,100	\$1,837,917	\$1,527,411

## SOFTWARE LICENSE FEES

**Evidence and data.** Software license fees for the FullStory DXI platform depend on a number of factors including the number of annual sessions for web and mobile platforms, number of users, and level of support for professional services and training employed.

**Modeling and assumptions.** To quantify the impact of these costs, Forrester assumes the following:

- The composite utilizes the FullStory DXI platform on 100% of its 100 million annual customer sessions across web and mobile platforms.
- The composite organization has licensing for 100 users overall.
- Pricing may vary. Contact FullStory for additional details.

**Risks.** Software license fees may vary from company to company based on:

- The size of the organization and overall scale of its digital platform in terms of annual customer sessions.
- The number of user licenses.
- The specific services, support model, and features the organizations choose.

**Results.** To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$1.4 million.

Software License Fees						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
E1	License fees	Interviews		\$550,000	\$550,000	\$550,000
Et	Software license fees	E1	\$0	\$550,000	\$550,000	\$550,000
	Risk adjustment	↑5%				
Etr	Software license fees (risk-adjusted)		\$0	\$577,500	\$577,500	\$577,500
Three-year total: \$1,732,500			Three-year present value: \$1,436,157			

## IMPLEMENTATION, DESIGN, AND MAINTENANCE COSTS

**Evidence and data.** Interviewees' organizations incurred costs for the initial planning, design, configuration, and deployment of the FullStory DXI platform. Beyond the initial launch, companies utilized a small team of technical resources to maintain and enhance their internal settings while ensuring continued compliance across websites and mobile apps.

- Interviewees said their companies utilized a team of three to 15 individuals to integrate the solution into their technology stacks, configure settings to meet internal legal and compliance standards, and deploy the solution to each of their platforms. Interviewees' companies generally deployed the FullStory DXI platform over a period of one to three months, utilizing a portion of different stakeholders' time.
- The senior director in retail shared, "Implementation was probably only two or three days of work over the span of two to three months — figuring out what we wanted our structure to look like, things like that."
- Representatives were able to focus their time on ways to enhance how they were using FullStory. The product manager in the food and beverage industry described their experience: "We've actually never done any maintenance [on FullStory]. It needs to be enhanced more than maintained. There have been a load of improvements since the POC and a lot of new events that we add to this."

**Modeling and assumptions.** Forrester assumes the following conditions for the financial analysis:

- The composite organization utilizes 20% of the time of a team of five individuals over a two-month period to deploy the FullStory DXI platform across its web and mobile platforms.
- The composite uses 10% of the time of two IT engineers to support design and maintenance updates for the FullStory DXI platform over the three-year investment period.
- Overall, implementation, design, and maintenance represent 6% of the total costs for the composite organization.
- The average fully loaded salaries for a planning implementation FTE and an IT engineer are \$118,000 and \$120,000, respectively.

**“We were able to install FullStory in a matter of sitting down with an engineer for 2 hours and deploying into production and then literally had all the data we needed to make informed design decisions from that point going forward.”**

*Senior vice president, IT and logistics*

**Risks.** These costs may vary for different organizations based on several factors:

- The skill set and salary levels of the implementation team
- The size and complexity of the organization's existing internal IT infrastructure and/or digital platform.
- The organization's requirements for internal design, change management strategy, and compliance standards.

**Results.** To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV of \$91,000.

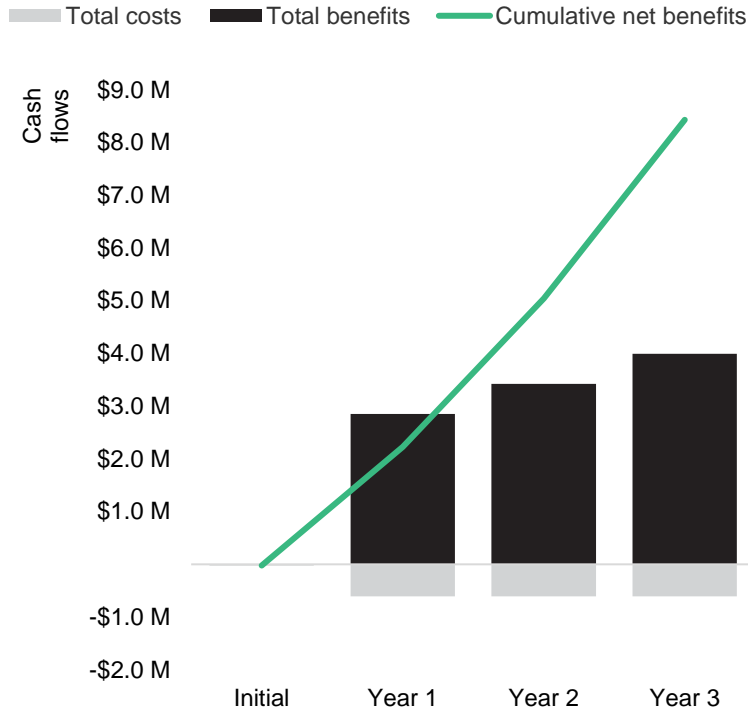
Implementation, Design, And Maintenance Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Planning and implementation team FTEs	Interviews	5			
F2	implementation period (months)	Interviews	2			
F3	Percentage of FTE time spent on planning and implementation	Interviews	20%			
F4	Planning and implementation team member fully loaded annual salary	TEI standard	\$118,000			
F5	Subtotal: Planning and implementation costs	$F1*(F2/12)*F3*F4$	\$19,667			
F6	IT engineer FTEs supporting design and maintenance updates	Interviews		2	2	2
F7	Time spent on design and maintenance updates	Interviews		10%	10%	10%
F8	IT engineer fully loaded annual salary	TEI standard		\$120,000	\$120,000	\$120,000
F9	Subtotal: Design and maintenance costs	$F2*F3*F6*F7$		\$24,000	\$24,000	\$24,000
Ft	Implementation, design, and maintenance costs	$F5+F9$	\$19,667	\$24,000	\$24,000	\$24,000
	Risk adjustment	↑15%				
Ftr	Implementation, design, and maintenance costs (risk-adjusted)		\$22,617	\$27,600	\$27,600	\$27,600
<b>Three-year total: \$105,417</b>			<b>Three-year present value: \$91,254</b>			



# 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 and NPV for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

**These risk-adjusted ROI and NPV 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	(\$22,617)	(\$605,100)	(\$605,100)	(\$605,100)	(\$1,837,917)	(\$1,527,411)
Total benefits	\$0	\$2,855,156	\$3,423,183	\$3,991,210	\$10,269,550	\$8,423,328
Net benefits	(\$22,617)	\$2,250,056	\$2,818,083	\$3,386,110	\$8,431,632	\$6,895,917
ROI						451%

## 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

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<sup>1</sup> 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.

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