## FORRESTER®



The Total Economic Impact™
Of Qlik Cloud Analytics™

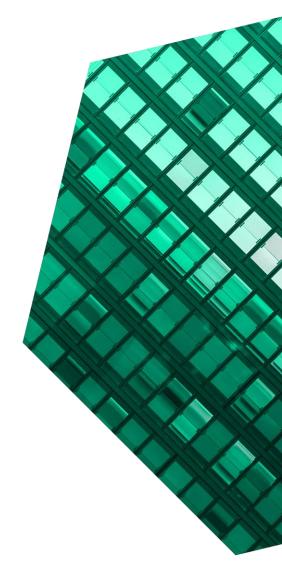
Cost Savings and Business Benefits Enabled by Qlik Cloud Analytics

**JANUARY 2024** 

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#### ABOUT FORRESTER CONSULTING

Forrester provides independent and objective <u>research-based consulting</u> to help leaders deliver key transformation outcomes. Fueled by our <u>customer-obsessed research</u>, 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 <u>forrester.com/consulting</u>.

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### **Executive Summary**

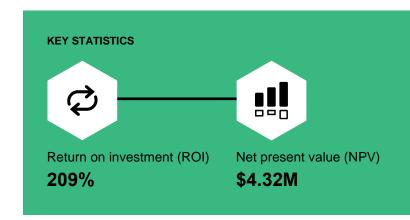
Modern organizations run on information. The efficacy of marketing campaigns, sales campaigns, product manufacturing, product distribution, internal and external communication, and the ability to adjust these aspects according to changing circumstances, all hinge on the right people having the right information at the right time. Getting this information is more easily said than done; often, organizational data is siloed by region or business section. Employees have to spend valuable time finding, organizing, and analyzing this data, only for business leaders to find themselves operating on outdated information anyway.

Qlik provides dynamic, Al-enabled analytics and business intelligence with both on-premises solutions and its cloud platform. Qlik can collect, aggregate, and organize data from across an organization, enabling intuitive visualization of data. Its associative engine further enables insights and discovery by allowing users to quickly search and organize their data without being limited by pre-aggregation or predefined queries.

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

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four representatives with experience using Qlik Cloud Analytics. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single <a href="composite">composite</a> organization that is a global organization with \$5 billion in revenue and 5,000 total employees.

Interviewees said that prior to using Qlik Cloud Analytics, their organizations were limited by onpremises solutions. Some used on-premises Qlik, while others had siloed, legacy business intelligence (BI) solutions from other organizations. This



frequently led to missed opportunities due to inadequate visualization and analysis of data, as well as costs from manual employee effort spent on trying to process data and ongoing costs to support legacy solutions through maintenance and subscription fees.

After the investment in Qlik Cloud Analytics, the interviewees were able to significantly streamline several manual processes concerned with and based on previously inaccessible data and improve their ability to quickly gather information to inform business decisions. Key results from the investment include improved revenue, saved employee time, and reduced total cost of ownership on legacy solutions.

#### **KEY FINDINGS**

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

- Improvement in revenue gain due to better decision-making. Because it accesses oncesiloed, inaccessible data and can process and act on that data without requiring time-consuming manual data analysis work first, the composite organization incrementally boosts its revenue year-over-year due to Qlik Cloud Analytics. Qlik's automation and alerting capabilities play a large role in the composite organization's ability to keep up with new data. Forrester's analysis determined that the composite organization experiences a risk-adjusted \$620,000 in revenue gains over the course of the three-year analysis.
- Time savings of 35% on data analysis. Qlik Cloud Analytics' visualization, aggregation, and organization of data, along with its associative engine eliminating restrictions present in Structured Query Language (SQL)-based solutions, makes it easier for data analysts and higher-level employees to realize insights and conduct analyses. Forrester estimates this time savings to be 35% by Year 3 of the investment, saving the composite organization a three-year, risk-adjusted total of \$1.1 million for the composite organization.
- Time savings of 50% on data preparation tasks. The composite organization's other data

Legacy BI costs eliminated by Year 3

100%



- analysis employees realize further time savings by eliminating more rote, manual data aggregation and processing work. This includes the automation of data reporting and dashboards, along with streamlining tasks relying on once-elusive data like filling out financial reports. By Year 3, these time savings amount to 50% with the composite organization saving a three-year, risk-adjusted \$2.5 million.
- Legacy system savings of 100%. Qlik Cloud
  Analytics enables the composite organization to
  fully move its data analysis and processing over
  to the cloud, allowing it to retire more of its legacy
  systems each year. By Year 3, 100% of legacy
  system maintenance cost and subscription costs
  are eliminated, leading to a risk-adjusted, threeyear total of \$2.1 million for the composite
  organization.

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

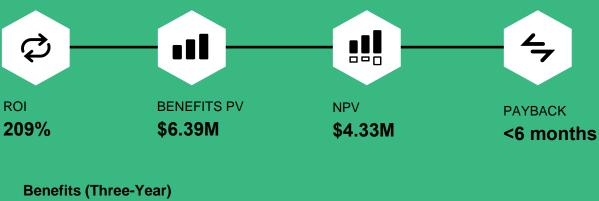
- Improved employee experience. Qlik's ease of use compared to other solutions, along with the elimination of various manual, time-consuming tasks associated with legacy or on-premises tools, makes related job functions significantly easier and less frustrating for employees.
- Increased data literacy. Interviewees reported that Qlik Cloud Analytics provides employees with user-friendly access to data, promoting a deeper understanding of key performance metrics and improving the data literacy of their employee base.
- Potential of additional features. Interviewees noted that Qlik had additional features they had not yet adopted, including capabilities like machine learning, which would be beneficial to them in the future.

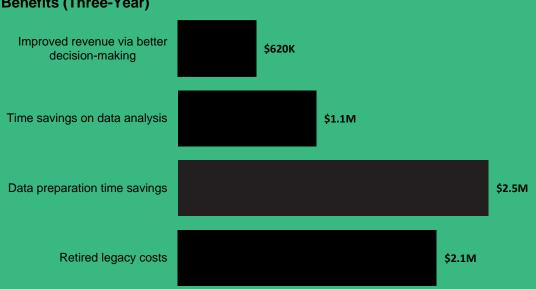
#### **EXECUTIVE SUMMARY**

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

- Ongoing annual subscription and professional services fees of \$966,000. These costs are based on the total number of Qlik users, total usage of Qlik, and a flat fee for professional services as-needed.
- Implementation effort and training costs of \$185,000. This assumes a small team working with professional services to transition to Qlik Cloud Analytics, as well as training for employees actively using Qlik.
- Ongoing data flow management costs of \$916,500. To make use of Qlik's data insights, the composite organization dedicates resources to manage the flows of data into and out of Qlik.

The representative interviews and financial analysis found that a composite organization experiences benefits of \$6.4 million over three years versus costs of \$2 million, adding up to a net present value (NPV) of \$4.3 million and an ROI of 209%.





"The thing I think Qlik does better than other tools is the association of data. In other tools, you have different data tables that are joined together to create a cohesive view, but they're much more fragmented in their applications than Qlik is. ... With the associative engine, if you make a selection in the application, as long as you've done your data modeling in a way that makes sense, then everything else in the application filters along with it."

Data engineer, industrial supply



#### 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 Qlik Cloud Analytics.

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 Qlik Cloud Analytics can have on an organization.

#### **DISCLOSURES**

Readers should be aware of the following:

This study is commissioned by Qlik 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 Qlik Cloud Analytics.

Qlik 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.

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



#### **DUE DILIGENCE**

Interviewed Qlik stakeholders and Forrester analysts to gather data relative to Qlik Cloud Analytics.



#### **INTERVIEWS**

Interviewed four representatives at organizations using Qlik Cloud Analytics 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 Qlik Cloud Analytics Customer Journey

Drivers leading to the Qlik Cloud Analytics investment

Interviews							
Role	Industry	Region	Annual Revenue				
Data engineer	Industrial supply	North America	\$287M				
Global data and analytics manager	Consumer goods	Global	\$1B				
Consultant	Jewelry	North America	\$360M				
VP of customer solutions	Logistics	Global	\$93B				

#### **KEY CHALLENGES**

Before engaging with Qlik Cloud Analytics, the interviewees noted their organizations primarily conducted data aggregation and analysis with onpremises tools. This included legacy deployments of Qlik, home-grown solutions, a mixture of other BI solutions, or using spreadsheets manually.

The interviewees noted how their organizations struggled with common challenges, including:

 Limited to nonexistent visibility into data. The interviewees noted their organizations' prior solutions, regardless of the type, were insufficient to provide business users with an accurate, upto-date view of the business.

The global data and analytics manager at a consumer goods organization stated, "There wasn't a holistic view of the data from a central perspective. Everything was regionalized, so a lot of reporting was done in completely different formats, different variations, even different data sources."

The jewelry company consultant explained to Forrester, "Folks tried to put some things together and bring other tools in, but it didn't happen as they hoped."

Inability to make timely, accurate decisions.
 The lack of visibility into organizational data

"A large part of the challenge was analysts having to actually go in to acquire the data, so there was a lot of manual downloading of data from different portals or electronic point-of-sale from retailers."

Global data and analytics manager, consumer goods

meant it was extremely difficult, if not impossible, for the interviewees' organizations to act quickly to changing business realities and make informed decisions.

The consultant at the jewelry company described, "Folks had their own version of truth based on what they were doing, and that was a challenge for the company to manage sales, revenue, and product performance — let alone workforce management."

The data engineer for the industrial supply organization stated, "Our prior tools were narrowly focused and didn't lend themselves well

to modifying dashboards or creating real analytics applications that let you dig in and find associations and opportunities."

The global data and analytics manager for the consumer goods organization explained: "From a bigger picture perspective, being able to actually react and make decisions in-market was always a challenge. You're always weeks — and in some cases, months — behind what's actually happening."

• Manual effort required to process and analyze data. What data processing and analysis did occur required heavy amounts of manual effort from administrative-level employees and data analysts, often yielding very little return for the high amount of effort required. Capabilities like alerts for important data and updates and automation of rote tasks were sorely needed.

The industrial supply data engineer elaborated on this point, noting, "There were requests for, say, an open orders report from sales reps and in a lot of cases, we would have to list all of the orders they had open for each one of those reports."

The jewelry company consultant concurred, stating: "There was a lot of manual effort. You had many spreadsheets, many products and forms extracting and generating different things ... the organization needed to make things easier, to simply report what they're doing and

"The finance organization had so many folks trapped on older tools. They had to make spreadsheets."

Consultant, jewelry company

how they're doing it without having to move a mountain in order to do it."

 Legacy solutions required time, money, and effort to maintain. The aforementioned legacy infrastructure that the interviewees struggled to use to provide useful business insights required significant investments of time, effort, and spend on subscription costs in order to maintain.

The VP of customer solutions for the logistics company explained: "With our prior solution, we saw some limitations. ... Pricing was limiting our capabilities."

The data engineer for the industrial supply company gave an example of the maintenance and duplicative effort required with their prior solutions, stating, "Whether it was due to volume of queries or something else, there would be failures on older tools, and we'd have to resend reports."

#### **INVESTMENT OBJECTIVES**

The interviewees' organizations searched for a solution that could:

- Improve decision-making.
- Retire legacy solutions.
- Save employee time on reporting and data analysis.

#### **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 global organization has \$5 billion in revenue and a total of 5,000 employees. As part of a larger shift towards the cloud, it moves away from its on-premises, legacy BI solutions in favor of Qlik Cloud Analytics with a significant initial deployment in Year 1 and increased adoption within the business year over year. A total of 150 employees are trained on Qlik Cloud Analytics.

#### **Key Assumptions**

- \$5 billion in revenue
- Global organization
- 5,000 total employees

## **Analysis Of Benefits**

Quantified benefit data as applied to the composite

Tota	Total Benefits									
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value				
Atr	Improved revenue via better decision-making	\$213,750	\$256,500	\$285,000	\$755,250	\$620,426				
Btr	Time savings on data analysis	\$382,500	\$459,000	\$535,500	\$1,377,000	\$1,129,395				
Ctr	Data preparation time savings	\$912,000	\$1,026,000	\$1,140,000	\$3,078,000	\$2,533,524				
Dtr	Retired legacy costs	\$760,000	\$855,000	\$950,000	\$2,565,000	\$2,111,270				
	Total benefits (risk-adjusted)	\$2,268,250	\$2,596,500	\$2,910,500	\$7,775,250	\$6,394,615				

#### IMPROVED REVENUE VIA BETTER DECISION-MAKING

Evidence and data. Interviewees reported that Qlik Cloud Analytics empowered their organizations to derive actionable insights from complex data sets, leading to informed, data-driven decisions. By using improved visibility, automations, and alerting to optimize decision-making, the interviewees' organizations were able to identify new revenue opportunities and allocate resources more efficiently, resulting in top-line benefits.

- The global data and analytics manager at the consumer goods organization noted how Qlik Cloud Analytics has affected their organizational strategy: "It's certainly acknowledged across the business that we are in a much better position to make timely and informed decisions, which naturally impacts our revenue and cost savings. ... We're making better decisions around competitors."
- The consultant at the jewelry company noted how Qlik Cloud Analytics helped them understand the performance of their products: "As we've acquired more source data, our merchandise, planning, and allocation have been a huge part of

"Day to day, we're using Qlik to be able to identify opportunities that we wouldn't have been able to with our old tools."

Data engineer, industrial supply

reporting as well. It's so important to understand what product sells or doesn't sell and the rotation of products ... all the metrics are very important. Now we're able to find things like, what are the top 10, top 20 products that exist? How is the new product launch doing? What are the bottom 20?"

- This interviewee went on to say, "This is data employees couldn't even see before and now every time you run your card through the tablet at the checkout, they have Qlik on it, and can see all sales, all traffic in near-real time."
- The data engineer at the industrial supply firm shared: "Our primary use case is finding out how much we're selling, who we're selling to, who the

vendors are, who's not buying things, and how that's changing over time. We're also measuring how the average cost of our products is changing over time."

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization has an annual revenue of \$1 billion that is impacted by Qlik Cloud Analytics.
- Insights from Qlik Cloud Analytics increases this revenue by between 0.15% and 0.2% each year.
- The composite organization has an operating margin of 15%.

**Risks.** The increase in revenue from improved decision-making will vary depending on the following factors:

- Overall company revenue and growth rate.
- The number of revenue-generating opportunities identified by using Qlik Cloud Analytics.
- Operating margins.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$620,000.

Impr	oved Revenue Via Better Deci	ision-Making			
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Company revenue impacted by Qlik	Composite	\$1,000,000,000	\$1,000,000,000	\$1,000,000,000
A2	Revenue uplift due to Qlik insights	Interviews	0.15%	0.18%	0.20%
А3	Operating margin	Composite	15.0%	15.0%	15.0%
At	Improved revenue via better decision- making	A1*A2*A3	\$225,000	\$270,000	\$300,000
	Risk adjustment	↓5%			
Atr	Improved revenue via better decision- making (risk-adjusted)		\$213,750	\$256,500	\$285,000
	Three-year total: \$755,250		Three-ye	ar present value: \$620	,426

#### TIME SAVINGS ON DATA ANALYSIS

Evidence and data. Interviewees noted that Qlik Cloud Analytics' robust automation, visualization, and aggregation capabilities streamlined data analysis processes and Qlik Cloud Analytics' associative engine enabled more flexible and dynamic data exploration while reducing the amount of work required from employees.

- The consultant at the jewelry company described how Qlik Cloud Analytics made data analysis easier, "We've been able to structure and streamline data ingestion and data modeling through our enterprise data warehouse, which unlocked a lot of ease within Qlik to pick up that data and just use it."
- The interviewee at the jewelry company went on to say: "For commissioning, associate performance, store performance, that all used to take tons of time from finance to scrape the data out, put it back together, and reattribute it. Now it's done automatically with Qlik, and they can run reports and understand what's going on."
- The data engineer at the industrial supply firm shared how Qlik Cloud Analytics has reduced the amount of time their organization spends on

"Qlik has revolutionized finding data for us. There was never any centralized point for anybody to go and get any kind of data prior to Qlik. Now if anybody needs anything, there's an app in Qlik so they can go and analyze the data."

Global data and analytics manager, consumer goods

reporting: "Qlik has a lot of built-in tools that allow us to slice and dice data and make different selections, whereas previously, a lot of what we had was either very out of the box or required manual work to set up reports that you couldn't reuse. With Qlik, we can select exactly what information we want to see about sales of a certain product and what customers we want to look at, and all of that is built into the application for more self-service reporting."

• The global data and analytics manager at the consumer goods firm praised Qlik's associative engine and the time it saved on analysis: "Qlik's associative engine was the absolute standout when considering our product selection ... the flexibility, the ease, the agility of being able to manage our data and surface up very, very large data sets to our customers with agility and analysis, that was the absolute standout."

Time savings on data analysis

25% to 35%



**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- Before adopting Qlik Cloud Analytics, the composite organization devotes 10 FTEs to data and reporting.
- Each of these FTEs have an average fully burdened annual salary of \$170,000.
- With Qlik Cloud Analytics, the composite organization reduces the amount of time devoted

#### **ANALYSIS OF BENEFITS**

to data analysis and reporting by 25% in Year 1. By Year 3, the composite achieves time savings of 35%.

**Risks.** The time savings on data analysis will vary depending on the following factors:

- The amount of internal effort devoted to data analysis and reporting.
- Fully burdened salaries of data analysts and managers.

 How much manual analysis effort Qlik Cloud Analytics automates.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$1.1 million.

Time	Savings On Data Analysis				
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Analysts and manager data analysis FTEs	Composite	10	10	10
B2	Fully burdened blended annual salary	TEI standard	\$170,000	\$170,000	\$170,000
В3	Percentage of time on data analysis saved by Qlik	Interviews	25%	30%	35%
Bt	Time savings on data analysis	B1*B2*B3	\$425,000	\$510,000	\$595,000
	Risk adjustment	↓10%			
Btr	Time savings on data analysis (risk-adjusted)		\$382,500	\$459,000	\$535,500
	Three-year total: \$1,377,000		Three-yea	r present value: \$1,129	,395

#### **DATA PREPARATION TIME SAVINGS**

Evidence and data. Interviewees noted that Qlik Cloud Analytics automated and eliminated repetitive manual tasks related to data processing and streamlined other administrative tasks, such as preparing financial reports or sharing data internally. Interviewees specifically cited Qlik's centralization of information, ability to enable automation around workflows, and alerting around specific points of interest.

- The global data and analytics manager at the consumer goods firm noted how Qlik Cloud Analytics saved employee time: "Account managers used to spend about one-fifth of their time pulling their transports, mapping it back, and mapping their protocols. We removed that need entirely for them."
- The same interviewee went on to describe how sharing information internally became easier with Qlik Cloud Analytics: "People would have to send emails or ask around 'Who do I need to get this from? Can you do me a favor?' So there was a lot of goodwill. Now, it's centrally accessible, it gives everybody the ability to go get information when they need it."

Time savings on administrative tasks impacted by Qlik Cloud Analytics

50%



 The data engineer at the industrial supply firm reported that their IT team also saw time savings when handling service requests with Qlik Cloud Analytics: "It's easier to service requests with Qlik, because generally, we're not having failures anymore ... by and large, the applications reload on time with the data that's needed. And if we need to fix anything or change anything, then we can fix it for everyone at once."

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- Prior to the adoption of Qlik Cloud Analytics, the composite organization has 20 FTEs dedicated to administrative work that is impacted by Qlik.
- These FTEs have an average fully burdened annual salary of \$120,000.
- Qlik Cloud Analytics allows the composite organization to reduce the amount of time devoted to these administrative tasks by 40% to 50%.

**Risks.** The time savings on data preparation tasks will vary depending on the following factors:

- Number of FTEs devoted to administrative tasks affected by Qlik Cloud Analytics.
- Fully burdened salaries of administrative FTEs.
- Degree to which Qlik Cloud Analytics can automate these tasks.

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



Data	Preparation Time Savings				
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	FTEs performing work on manual data processing, reporting, and finance impacted by Qlik	Composite	20	20	20
C2	Fully burdened annual administrative FTE salary	TEI standard	\$120,000	\$120,000	\$120,000
C3	Time savings on manual data processing through Qlik	Interviews	40%	45%	50%
Ct	Data preparation time savings	C1*C2*C3	\$960,000	\$1,080,000	\$1,200,000
	Risk adjustment	↓5%			
Ctr	Data preparation time savings (risk-adjusted)		\$912,000	\$1,026,000	\$1,140,000
	Three-year total: \$3,078,000		Three-year	present value: \$2,533,5	24

#### RETIRED LEGACY COSTS

**Evidence and data.** Interviewees noted that Qlik Cloud Analytics empowered their organizations to transition their data analysis and processing to the cloud, facilitating the retirement of legacy systems. Interviewees also reduced costs associated with managing legacy platforms, yielding additional savings.

- The data engineer at the industrial supply firm stated: "We were using three other tools before Qlik. We've already turned one off, we're turning another one off now, and the third one will eventually be on the chopping block, too. I don't think there's anything they can do that Qlik can't."
- The global data and analytics manager at the consumer goods organization confirmed that Qlik Cloud Analytics replaced their incumbent solution and described how their solution management costs have declined: "[Qlik Cloud Analytics] pretty much runs itself to be honest. ... We have to manage the data flows and processes, but we don't have to manage the platform itself. When we had Qlik on-prem, we would have to do quarterly updates, but on the cloud, that becomes self-managing. There's no additional overhead."

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

"We were able to retire our main legacy product within 12 months."

Global data and analytics manager, consumer goods

- The composite organization's incumbent solution has total subscription costs of \$800,000 per year.
- Before adopting Qlik Cloud Analytics, the composite organization devotes \$200,000 each year to managing the legacy system.
- With Qlik Cloud Analytics, the composite organization reduces its total legacy costs by 80% in Year 1, 90% in Year 2, and 100% in Year 3.

**Risks.** The legacy cost savings will vary depending on the following factors:

- Costs of incumbent solution.
- Speed at which the legacy system can be decommissioned.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$2.1 million.

Retir	ed Legacy Costs					
Ref.	Metric	Source	Year 1	Year 2	Year 3	
D1	Total legacy subscription costs	Composite	\$800,000	\$800,000	\$800,000	
D2	Total legacy platform management costs	Composite	\$200,000	\$200,000	\$200,000	
D3	Percentage of costs avoided per year	Interviews	80%	90%	100%	
Dt	Retired legacy costs	(D1+D2)*D3	\$800,000	\$900,000	\$1,000,000	
	Risk adjustment	↓5%				
Dtr	Retired legacy costs (risk-adjusted)		\$760,000	\$855,000	\$950,000	
	Three-year total: \$2,565,000		Three-year present value: \$2,111,270			



#### **UNQUANTIFIED BENEFITS**

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

- Improved employee experience. Interviewees noted that Qlik Cloud Analytics' user-friendly interface and its ability to eliminate time-consuming tasks reduced employee frustration. The data engineer at the industrial supply firm described the improvement in employee experience, stating, "The feedback we've had from people using Qlik has heavily emphasized that they like it and that it allows them to access data in the ways that they need to."
- Increased data literacy. Interviewees shared that Qlik Cloud Analytics fostered a data-literate culture by enabling employees to explore and understand key performance indicators (KPIs). The global data and analytics manager at the consumer goods firm stated that, "We've been able to use Qlik to help support data literacy in the way that we show people data and the way we explain visualizations to people."
- Potential of additional features. Several of the interviewees were not fully using all of Qlik's features, such as machine learning, and were excited to grow their usage and for future updates.

"Folks saw in Qlik a lot of capabilities that they weren't getting with what they already had. The technology itself had a more modern and friendly UI, and that's huge for their industry. Moving fast and being intuitive is crucial."

Consultant, jewelry company

## **Analysis Of Costs**

Quantified cost data as applied to the composite

Total	l Costs						
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	Ongoing subscription and professional services costs	\$0	\$388,500	\$388,500	\$388,500	\$1,165,500	\$966,142
Ftr	Implementation effort and training costs	\$185,487	\$0	\$0	\$0	\$185,487	\$185,487
Gtr	Ongoing data flow management costs	\$0	\$368,550	\$368,550	\$368,550	\$1,105,650	\$916,529
	Total costs (risk- adjusted)	\$185,487	\$757,050	\$757,050	\$757,050	\$2,456,637	\$2,068,158

## ONGOING SUBSCRIPTION AND PROFESSIONAL SERVICES COSTS

**Evidence and data.** Interviewees described the ongoing costs their organization incurred with Qlik Cloud Analytics.

- All interviewees noted their organizations paid a subscription fee based on the total number of Qlik Cloud Analytics users and the total usage of Cloud Analytics. Note that since this study was conducted, Qlik has introduced capacity-based pricing.
- Interviewees also reported incurring a flat professional services fee.

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization pays a combined \$250,000 per year in consumption-based and user-based fees.
- The composite also incurs professional services costs of \$120,000 per year.

**Risks.** Ongoing costs will vary depending on the following factors:

- Total usage of Qlik.
- Degree of professional services required.

**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 \$966,000.

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	4	4

Ongo	Ongoing Subscription and Professional Services Costs							
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3		
E1	Consumption- and user-based subscription fees	Composite		\$250,000	\$250,000	\$250,000		
E2	Annual professional services fees required to run Qlik	Composite		\$120,000	\$120,000	\$120,000		
Et	Ongoing subscription and professional services costs	E1+E2		\$370,000	\$370,000	\$370,000		
	Risk adjustment	↑5%						
Etr	Ongoing subscription and professional services costs (risk-adjusted)		\$0	\$388,500	\$388,500	\$388,500		
	Three-year total: \$1,165,500		Thre	e-year present v	alue: \$966,142			

# IMPLEMENTATION EFFORT AND TRAINING COSTS

**Evidence and data.** The interviewees provided descriptions of the process of implementing Qlik Cloud Analytics and training new users at their organizations.

- The interviewees' organizations incurred a onetime professional services fee for the implementation.
- Interviewees stated that a small team worked with Qlik on the initial implementation with the process taking several weeks to complete.
- Once Qlik Cloud Analytics was implemented, employees only required a brief training to familiarize themselves with the platform.

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization incurs a one-time professional services fee of \$60,000 for the initial implementation.
- A team of four employees spends eight weeks implementing Qlik Cloud Analytics.
- The employees on the implementation team have an average fully burdened weekly salary of \$2,700.

- The composite organization trains 150 employees on using Qlik Cloud Analytics with each employee receiving 1 hour of training.
- Employees trained on Qlik Cloud Analytics have an average fully burdened hourly wage of \$58.

**Risks.** The legacy cost savings will vary depending on the following factors:

- The size of the implementation team.
- The salary of employees implementing and being trained on Qlik Cloud Analytics.
- The amount of time required for implementation and training.

**Results.** To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of \$185,500.

Imple	ementation Effort and Training	Costs				
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	One-time professional services costs	Interviews	\$60,000			
F2	Size of implementation team	Composite	4			
F3	Fully burdened blended weekly implementation team salary	TEI standard	\$2,700			
F4	Weeks required for implementation	Interviews	10			
F5	Total number of employees using Qlik	Composite	150			
F6	Hours of training required for Qlik	Interviews	1			
F7	Fully burdened blended hourly FTE salary	TEI standard	\$58			
Ft	Implementation effort and training costs	F1+(F2*F3*F4)+( F5*F6*F7)	\$176,654	\$0	\$0	\$0
	Risk adjustment	↑5%				
Ftr	Implementation effort and training costs (risk-adjusted)		\$185,487	\$0	\$0	\$0
Three-year total: \$185,487 Three-year present value: \$185,487					e: \$185,487	

#### **ONGOING DATA FLOW MANAGEMENT COSTS**

**Evidence and data**. Interviewees reported that their organizations devoted a small team of internal employees to manage the flows of data into and out of Qlik Cloud Analytics.

**Modeling and assumptions.** Based on the interviews, Forrester assumes the following about the composite organization:

- The composite devotes 2.5 FTEs to managing data flows on an ongoing basis.
- These internal FTEs have an average fully burdened annual salary of \$140,400.

**Risks.** The legacy cost savings will vary depending on the following factors:

- Size of internal team managing data flows.
- Average annual salary of management team.

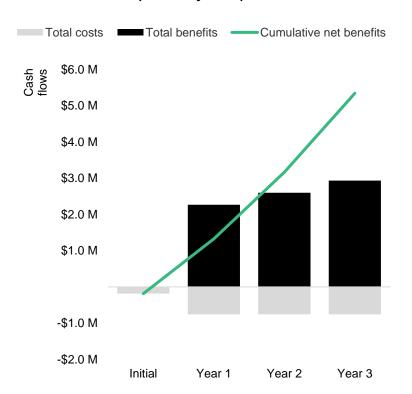
**Results.** To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$917,000.

Ongo	oing Data Flow Management C	osts				
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
G1	FTEs on ongoing operations and analytics management team managing data flows	Interviews		2.5	2.5	2.5
G2	Fully burdened blended annual operations and analytics management team salary	TEI standard		\$140,400	\$140,400	\$140,400
Gt	Ongoing data flow management costs	G1*G2	\$0	\$351,000	\$351,000	\$351,000
	Risk adjustment	↑5%				
Gtr	Ongoing data flow management costs (risk-adjusted)		\$0	\$368,550	\$368,550	\$368,550
	Three-year total: \$1,105,650		Three	e-year present v	value: \$916,529	

## **Financial Summary**

#### **CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS**

#### **Cash Flow Chart (Risk-Adjusted)**



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Analysis (Risk-Adjusted Estimates)						
	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$185,487)	(\$757,050)	(\$757,050)	(\$757,050)	(\$2,456,637)	(\$2,068,158)
Total benefits	\$0	\$2,268,250	\$2,596,500	\$2,910,500	\$7,775,250	\$6,394,615
Net benefits	(\$185,487)	\$1,511,200	\$1,839,450	\$2,153,450	\$5,318,613	\$4,326,457
ROI						209%
Payback					_	<6 months

# Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

#### TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

**Costs** consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

**Flexibility** represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

**Risks** measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.



#### PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



#### **NET PRESENT VALUE (NPV)**

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made unless other projects have higher NPVs.



#### **RETURN ON INVESTMENT (ROI)**

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.



#### **DISCOUNT RATE**

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



#### **PAYBACK PERIOD**

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

## **Appendix B: Endnotes**

<sup>&</sup>lt;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.

