A Forrester Total Economic Impact™
Study Commissioned By Galvanize
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The Total Economic Impact™ Of HighBond By Galvanize

Cost Savings And Business Benefits Enabled By The HighBond Platform For A Manufacturing Organization

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ABOUT FORRESTER CONSULTING

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

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Executive Summary

Galvanize helps organizations gain better business visibility and improve real-time decision insights. Its solutions provide governance, risk, and compliance (GRC) management software for: audit and compliance, assessing strategic risk; executing risk mitigation and assurance activities; continuously monitoring data and operational processes; managing fraud, waste, and abuse; and creating compliance and risk reports.

Galvanize commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential ROI enterprises may realize by deploying GRC management software. The purpose of this study, the seventh TEI in a series of case studies focused on individual organizations for Galvanize, is to provide readers with a framework to evaluate the potential financial impact of the HighBond platform on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed a current HighBond customer: a large international manufacturer headquartered in Latin America with more than a year of experience using the HighBond platform.

Prior to implementing HighBond, the interviewed customer: 1) was exposed to high third-party risk, fraud, waste, and abuse; 2) was slow to collect outstanding receivables; 3) was not able to closely track inventory (resulting in more goods being warehoused before distribution); and 4) kept a much less frequent compliance and audit schedule.

With HighBond, the manufacturer has seen improvements in reduced fraud and waste; shorter days receivables outstanding (DRO); less goods having to be kept in warehouses; and a more agile compliance process enabling more thorough compliance and risk management.

Key Findings

Quantified benefits. The manufacturer experienced the following risk-adjusted present value (PV) quantified benefits:

› **Reduced third-party risk, fraud, and waste.** The manufacturer saw a volume of nearly $300 million at risk of fraud and waste. With the establishment of 25 risk-mitigating controls, associated monitoring processes, and other best practices, the organization has seen reduced fraud and waste — with a significant portion directly attributable to HighBond, adding up to $2.4 million.

› **Better receivables tracking and management.** Resulted in reduced DRO, for an early cash-flow benefit of nearly $501,000.

› **Improved inventory management.** Manufacturer was better able to track demand trends and more accurately prepare for orders with the right amount of product stored in warehouses. This reduction in inventory carrying costs adds up to more than $369,000.

› **Reduced volume of product for consignment sales.** Through more accurate customer profiling, target customers that need consignment sales assistance are given it, adding up to more than $402,000 in consignment cost savings.

› **Increased surplus goods sales.** With better tracking and management of surplus goods, the organization has been able to increase surplus goods sales by 300%, adding up to more than $236,000.

Benefits And Costs

Reduced third-party risk, fraud, waste, and abuse costs:
$2.4 million

DRO reduced from 70 to 54 days results in a benefit of:
$501,000

Reduced costs providing product on consignment:
$402,000

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ROI
373%

Benefits PV
$4.4 million

Costs PV
$940,000

NPV
$3.5 million

- **Avoided compliance team hires.** With HighBond, the Latin America compliance team, for the manufacturer, was able to keep the team at just two people, avoiding the salary costs and the recruiting/training time for at least two more potential compliance team hires, estimated at more than $549,000.

Unquantified benefits. The manufacturer experienced the following additional benefits, which are not quantified for this study:

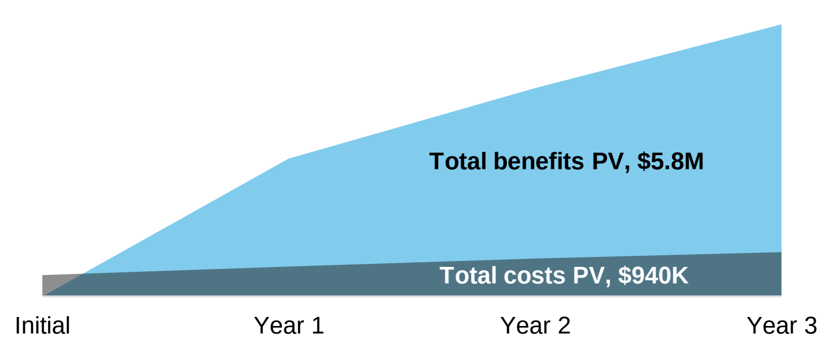
- **Improved audit and compliance quality.** In collaboration with the internal audit, the compliance team has been able to establish risk-based tests and projects. This partnership has helped focus the information provided to top management, leading to greater efficiency in improving financial and operational results.
- **Better executive decision making.** The quality of senior management reports has been significantly improved, ensuring that leaders include more up-to-date data and more accurate risk analysis in the company's decision-making process.

Costs. The manufacturer experienced the following risk-adjusted PV costs:

- **HighBond licensing and services costs.** HighBond licenses are estimated to be $60,000 per year, plus an additional $20,000 in HighBond additional services and support in Year 1, lowering to $10,000 by Year 3. Annual resource costs primarily include the two compliance officers that conduct many of the same day-to-day tasks, though some tasks are much easier to complete today — some new tasks associated directly with HighBond are considered as part of the investment. Total annual costs add up to nearly $482,000.
- **Implementation costs.** The manufacturer spent a year planning for their HighBond implementation, including data reviews and migration, new data tracking processes, and new best practices and workflows associated with the plethora of new data available to business managers. The implementation required significant time investment from the two compliance team employees, as well as a number of business resources and managers joining the team as needed, adding up to an equivalent of three full-time employees involved through the implementation period. Total implementation adds up to nearly $459,000.

Forrester's interview with an existing customer and subsequent financial analysis found that the interviewed organization experienced benefits of more than $4.4 million over three years versus costs of about $940,000, adding up to a net present value (NPV) of more than $3.5 million and an ROI of 373%.

Financial Summary



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

TEI Framework And Methodology

From the information provided in the interview, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing HighBond.

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 HighBond can have on an organization. Specifically:

DUE DILIGENCE
Interviewed Galvanize stakeholders and Forrester analysts to gather data relative to GRC.

CUSTOMER INTERVIEW
Interviewed one organization using HighBond to obtain data with respect to costs, benefits, and risks.

FINANCIAL MODEL FRAMEWORK
Constructed a financial model representative of the interview using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organization.

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

DISCLOSURES

Readers should be aware of the following:

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

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in HighBond by Galvanize.

Galvanize 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.

Galvanize provided the customer name for the interview but did not participate in the interview.

The HighBond Customer Journey

BEFORE AND AFTER THE HIGHBOND INVESTMENT

Interviewed Organization

For this study, Forrester interviewed the head of governance, risk, and compliance (GRC) at a global manufacturer headquartered in Latin America. This organization, a HighBond customer, has more than 5,000 employees and more than $500 million USD in annual revenues.

Key Challenges

The organization identified several areas that could quickly become serious problems and other missed opportunities:

- **Vulnerability to third-party risk, fraud, and waste.** The organization had few controls in place to review vendor relationships, monitor transactions, and efficiently recover money after issues such as a double payment.
- **Inefficient operations.** Spreadsheet-driven processes meant getting answers from data analysis was slow, resulting in areas like inventory management carrying extra volumes because there was no better data to know what the right amount would be.
- **Missed revenue opportunities.** Without good analytics to back up a business decision (or even find the opportunity in the first place), opportunities were missed.
- **Inefficient compliance processes.** The compliance team was not able to keep up with the need to control and monitor areas like third-party transactions that were at risk for fraud, waste, or abuse.

> "We are committed to having good vendor relationships, but also committed to avoiding fraud."
>
> *Head of GRC, manufacturer*

Platform Requirements

The interviewed organization searched for a s that could:

- Connect to a variety of financial, transaction, reporting, and management systems.
- Enable quick development of reports and executive dashboards.
- Flag potential issues or mistakes for further review. The head of GRC at the manufacturer explained, "We are committed to having good vendor relationships, but also committed to avoiding fraud."

The manufacturer chose HighBond and began deployment:

- Implementation started in 2017.
- Concurrently, the organization carried out a project to identify and validate strategic risks.
- These risks were evaluated and prioritized within HighBond to be ready for monitoring operational risk at day one.

> "Before HighBond, this data was in spreadsheets."
>
> *Head of GRC, manufacturer*

Key Results

After interviewing the manufacturer, Forrester organized and articulated the business value of implementing Galvanize's HighBond platform.

Benefits, cost metrics, and financial results follow Forrester Consulting's TEI framework as well as the recent Forrester report, "Build The Business Case For GRC" report."[1] HighBond benefits include:

- **Reduced third-party risk, fraud, and waste.** With HighBond, before the manufacturer initiates any agreement with a new vendor, several due diligence processes are undertaken to check for any past issues working with the manufacturer or other companies. "We do not work with any company that has problems with fraud," said the head of GRC at the manufacturer.
- **Cash-flow benefits.** Shorter DRO adds up to millions of dollars in additional Year 1 cash flow, which the organization invested into further improvements, research, and development.
- **Real-time access to data enables more complete and timely business decisions.** HighBond can help estimate accurate inventory levels and better target customers that might need assistance. The organization has reduced inventory carrying costs, and has also been able to reduce the reliance on consignment sales. The head of GRC said: "Before HighBond, this data was in spreadsheets. So, it wasn't fast to find anything."
- **New sales opportunities.** With better management of surplus goods, the manufacturer is able to collect and sell these surpluses more effectively, compared to before when many items were simply forgotten and disposed of, or sold at a deep discount. "We use HighBond to find the right problems, focus data on what we need, and can achieve the right solution," said the head of GRC at the manufacturer.
- **A more efficient compliance team.** Looking back on the team's previous processes, the head of GRC at the manufacturer explained, "I think we would have needed two more people to make this work." With the improvements in compliance efficiency, the manufacturer estimates it would have had to hire at least two more compliance managers to keep up with the work that was automated with HighBond.

> "We use HighBond to find the right problems, focus data on what we need, and we can achieve the right solution."
>
> *Head of GRC, manufacturer*

> "I think we would have needed two more people to make this work."
>
> *Head of GRC, manufacturer*

Analysis Of Benefits

QUANTIFIED BENEFIT DATA

Total Benefits

REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Fraud, waste, and abuse reduction	$960,000	$960,000	$960,000	$2,880,000	$2,387,378
Btr	Days receivables outstanding (DRO)	$551,000	$0	$0	$551,000	$500,909
Ctr	Reduction in inventory costs	$148,200	$148,200	$148,200	$444,600	$368,551
Dtr	Reduction of product on consignment	$161,500	$161,500	$161,500	$484,500	$401,627
Etr	Surplus goods sales	$95,000	$95,000	$95,000	$285,000	$236,251
Ftr	Compliance resource cost savings	$281,200	$186,200	$186,200	$653,600	$549,415
	Total benefits (risk-adjusted)	**$2,196,900**	**$1,550,900**	**$1,550,900**	**$5,298,700**	**$4,444,131**

Reduction In Fraud, Waste, And Abuse (FWA)

With HighBond, the organization was able to more closely monitor transaction volumes between itself, customers, and vendors to reduce the risk of FWA losses. The organization is involved in about $300 million worth of transaction volume, and estimates that it has reduced fraud, waste, and abuse costs by two percentage points. (Because FWA is a sensitive topic and the improvement is the key metric needed for this benefit, the before and after percentages are not provided; a two-percentage-point improvement means, for example, a change from 10% to 8%, or 3% to 1%.)

With HighBond, the manufacturer can more closely monitor vendor relationships and flag any with questionable relationships, practices, or past issues. “For example, vendor bank accounts are confirmed before payment, and possible conflicts of interest are reviewed carefully,” said the head of GRC at the manufacturer. Questionable transactions can also be flagged, with most being stopped before they happen, or, at least, can more quickly start a remediation process. The manufacturer identified 25 areas of potential risk to monitor and review. At HighBond launch, the manufacturer reviewed its current vendor portfolio and found several that were deemed high risk, and ended business with them quickly. These efforts all lead to reduced costs associated with fraud and other issues, as well as helping future audits go more smoothly — a problematic business partner could lead to extra audit time or even fines or other costs. The organization estimates:

- A two-percentage point reduction in costs associated with fraud, waste, and abuse, partly impacted by monitoring and review of 25 key risk areas with HighBond.
- FWA reduction is impacted by more than just software and reporting. Beyond HighBond, it also implemented best practices and other safeguards to help avoid issues. As part of an organizationwide effort,

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the interviewed organization expects risk-adjusted total benefits to be a PV of nearly $4.4 million.

Fraud costs reduced two percentage points.

“For example, vendor bank accounts are confirmed before payment, and possible conflicts of interest are reviewed carefully.”

Head of GRC, manufacturer

the manufacturer estimates that at least 20% of FWA reduced costs is due to risk monitoring and management with HighBond.

These inputs and estimates vary from year to year and from organization to organization and can significantly impact benefit totals. For the manufacturer, benefit estimates may vary due to:

- Differences in relationships from vendor to vendor.
- The number of mistakes made by employees or vendors.
- The number of opportunities for fraud and abuse to occur and how easy it is to carry out.
- Organizations may have a significant risk of fines faced under the US Foreign Corrupt Practices Act and other government regulations.

To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a benefit of $960,000 per year, which adds up to a three-year risk-adjusted total PV of nearly $2.4 million.

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

Reduction In Fraud, Waste, And Abuse (FWA): Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
A1	Volume exposed to FWA		$300,000,000	$300,000,000	$300,000,000
A2	Risk controls monitored		25	25	25
A3	Reduction in amount of volume lost to FWA		2%	2%	2%
A4	FWA reduction directly attributable to HighBond		20%	20%	20%
At	Cost avoidance from reduced fraud, waste and abuse	A1*A3*A4	$1,200,000	$1,200,000	$1,200,000
	Risk adjustment	↓20%			
Atr	**Cost avoidance from reduced fraud, waste and abuse (risk-adjusted)**		**$960,000**	**$960,000**	**$960,000**

Reduced Days Receivables Outstanding Cash-Flow Benefit

Through HighBond, the manufacturer enabled a significant cash flow bump for improvements or added research and development. This cash-flow benefit was enabled by reducing days receivables outstanding (DRO) from 70 days to 54. “With the improvements in the controls on receivables and inventory management using analysis and the monitoring structure of HighBond, we managed to increase cash flow,” said the manufacturer’s head of GRC.

Days receivable outstanding (DRO):
70 days before
54 days today

With HighBond, the manufacturer could improve the monitoring of outstanding payments due to it, thus more quickly identifying and responding to any delays or issues. The manufacturer’s head of GRC explained: “The result was achieved by the data. I can use the data to quickly understand the problem. I can find what kind of invoice is in delay, what kind of invoice is in deadline.” The efforts to reduce third-party risk include setting a higher bar for vendor relationships, which also contributed to this improvement. For the interviewed organization, Forrester assumes:

- DRO was reduced by 23%, going from 70 days to 54 days.

- Receivables volume went from $29.7 million to $23.9 million.
- The organization gained a one-time cash-flow benefit of $5.8 million.
- As a one-time event, the company would reinvest that $5.8 million back into the business or other investments. As a conservative estimate, a standard cost of capital of 10% is used here.

Reduced Days Receivables Outstanding Cash-Flow Benefit: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	Receivables volume before HighBond		$29,700,000		
B2	Receivables volume after HighBond		$23,900,000		
B3	Receivables one-time cash-flow benefit	B1-B2	$5,800,000		
B4	Standard rate of capital		10%		
Bt	Annual DRO benefit from faster invoice payments	B3*B4	$580,000	$0	$0
	Risk adjustment	↓5%			
Btr	**Annual DRO benefit from faster invoice payments (risk-adjusted)**		**$551,000**	**$0**	**$0**

The large volume of receivables has a lot of variability from transaction to transaction that could lead to overestimated benefits. To account for these risks, Forrester adjusted this benefit downward by 5%, which results in a one-time benefit of $551,000 (which happened in the first year of the analysis period). Since even first-year benefits are affected by the value of money over time, the risk-adjusted total PV is $501,000.

"We were able to reduce inventories by evaluating the turnover for each product."

Head of GRC, manufacturer

Better Management Of Inventory

The organization was able to reduce its need for warehousing inventory goods. With HighBond, the manufacturer can more easily collect inventory and delivery data, as well as more easily prepare reports to glean insights from data and develop a right-size approach to the inventory it needs to carry. "We were able to reduce inventories by evaluating the turnover for each product," said the head of GRC.

Better Management Of Inventory: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
C1	Inventory warehoused before		$6,300,000	$6,300,000	$6,300,000
C2	Reduction in goods stored in inventory since HighBond		20%	20%	20%
C3	Inventory warehoused since HighBond	C1*(1-C2)	$5,040,000	$5,040,000	$5,040,000
C4	Reduction in inventory goods costs	C1-C3	$1,260,000	$1,260,000	$1,260,000
C5	Standard rate of capital		10%	10%	10%
C6	Warehouse storage cost savings		$30,000	$30,000	$30,000
Ct	Reduction in inventory costs	C4*C5+C6	$156,000	$156,000	$156,000
	Risk adjustment	↓5%			
Ctr	**Reduction in inventory costs (risk-adjusted)**		**$148,200**	**$148,200**	**$148,200**

The organization estimates that:

- Inventory warehoused before HighBond implementation totaled $6.3 million in value each year.
- Today, that is reduced by 20%, leading to a cost of just over $5 million per year.
- A conservative standard cost of capital of 10% is used.

Inventory has a lot of seasonality and variability from year to year. Inventory savings can also come from a number of sources. To account for these risks, Forrester adjusted this benefit downward by 5%, resulting in an annual benefit of more than $148,000, which adds up to a three-year risk-adjusted total PV of nearly $369,000.

Better Management Of Consignment Sales

The organization was also able to reduce consignment sales (the agreement to deliver goods but be paid later after a sale). With HighBond the manufacturer can more easily track business data down to each vendor and customer relationship, meaning that it can more accurately identify when to offer a consignment sale agreement and also when it might not be necessary. The organization estimates that:

- Consignment sales totaled $2.2 million in value each year.
- Today that is reduced by more than three-fourths, to $500,000 per year.
- A conservative standard cost of capital of 10% is used.

Better Management Of Consignment Sales: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
D1	Consignment inventory balance before		$2,200,000	$2,200,000	$2,200,000
D2	Consignment inventory balance with HighBond		$500,000	$500,000	$500,000
D3	Reduction in consignment inventory balance	D1-D2	$1,700,000	$1,700,000	$1,700,000
D4	Standard rate of capital		10%	10%	10%
Dt	Reduction in consignment costs	D3*D4	$170,000	$170,000	$170,000
	Risk adjustment	↓5%			
Dtr	**Reduction in consignment costs (risk-adjusted)**		**$161,500**	**$161,500**	**$161,500**

Similar to inventory, there is a lot of seasonality and variability with consignment sales in the needs from customer to customer. To account for these risks, Forrester adjusted this benefit downward by 5%, adding up to a benefit of nearly $162,000 per year, or a three-year risk-adjusted total PV of more than $402,000.

Initial: $50,000 in surplus sales per year

Today: $150,000 per year

Surplus Sales Growth

Like with consignment sales, the manufacturer was able to better collect and analyze data to target more surplus sales opportunities. Like many manufacturers, not everything is suitable for continuation in the primary supply chain. Goods with flaws, unused raw materials, and other waste byproducts, all often have a secondary market, and the organization can more effectively identify where surplus goods are and sell to potential buyers. While not a large part of the business, the manufacturer was able to triple its annual surplus sales, from $50,000 to $150,000 per year.

Surplus Sales Growth: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
E1	Annual surplus sales before		$50,000	$50,000	$50,000
E2	Improvement in sales with HighBond		300%	300%	300%
E3	Annual surplus sales since HighBond	E1*E2	$150,000	$150,000	$150,000
Et	Improved income from surplus sales	E3-E1	$100,000	$100,000	$100,000
	Risk adjustment	↓5%			
Etr	**Improved income from surplus sales (risk-adjusted)**		**$95,000**	**$95,000**	**$95,000**

While accurate estimates, the amount of surplus goods and the market for them can vary greatly. To account for these risks, Forrester adjusted this benefit downward by 5% to an annual benefit of $95,000 which adds up to a three-year risk-adjusted total PV of more than $236,000.

Compliance Team Efficiency

The manufacturing compliance team supports all the benefits described above, and more, with a team of two. As mentioned, the manufacturer explored a new solution and invested in HighBond because of escalating costs in areas such as fraud and waste, and the realization of missed opportunities. To meet the same solution goals made possible with HighBond, the team would have had to recruit, train, and hire at least two more compliance managers to keep up with the work volume that has been automated using HighBond. The estimated salary for this role is just shy of $100,000 per year, and the organization estimates there would have been an added one-time recruiting cost to find and hire two people.

The manufacturer was able to avoid two more hires to keep up with what the compliance team can do with HighBond.

Compliance Team Efficiency: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
F1	Compliance team members today		2	2	2
F2	Additional compliance team members that would have been needed to perform the equivalent work volume automated using HighBond		2	2	2
F3	Compliance manager annual salary (fully burdened)		$98,000	$98,000	$98,000
F4	Recruiting and training costs avoided		$100,000		
Ft	Avoided compliance resource costs	F2*F3+F4	$296,000	$196,000	$196,000
	Risk adjustment	↓5%			
Ftr	**Avoided compliance resource costs (risk-adjusted)**		**$281,200**	**$186,200**	**$186,200**

Since salaries and ramp-up time may be overestimated, Forrester adjusted this benefit downward by 5% for an annual benefit of more than

$281,000 which adds up to a three-year risk-adjusted total PV of more than $549,000.

Unquantified Benefits

Many results enabled by improved compliance are more difficult (or confidential) to share quantitatively. But the manufacturer has identified:

- **Improved audit and compliance quality.** In collaboration with the internal audit, the compliance team has been able to establish risk-based tests and projects. This partnership with the internal audit team has helped focus information provided to top management, leading to greater efficiency in improving financial and operational results.
- **Better executive decision making.** The quality of reports for senior management has significantly improved, ensuring that leaders include more up-to-date data and more accurate risk analysis in the company's decision-making process. The head of GRC explained, "GRC is not just to find gaps, but to find solutions."

> "GRC is not just to find gaps, but to find solutions."
>
> *Head of GRC, manufacturer*

Flexibility

The Forrester TEI methodology includes flexibility, or the potential value of future continued investment in a solution. The value of flexibility is clearly unique to each customer, and the measure of its value varies from organization to organization. There are multiple scenarios in which a customer might choose to implement HighBond and later realize additional uses and business opportunities. The manufacturer would like to continue its efforts for better data management, visibility into more areas of the business, and better business performance, including:

- With continued investment and integration of HighBond into more data sources and transaction feeds, the manufacturer hopes to continue to reduce its risk of fraud, waste, and abuse. This could also include other data-backed processes such as inventory management, consignment sales, and the other benefits quantified above — potentially leading to even more capital gains and/or a higher rate of return.
- Furthermore, the manufacturer hopes to expand its HighBond implementation into other areas of the business, to provide a companywide, "structure for monitoring risks, helping the company achieve more confident and informed decision making," as said by the head of GRC.

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

A companywide structure for monitoring risks can help improve decision making.

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for a future additional investment. This provides an organization with the "right" or the ability to engage in future initiatives but not the obligation to do so.

Analysis Of Costs

QUANTIFIED COST DATA

Total Costs

REF.	COST	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Gtr	Ongoing costs	$0	$198,660	$193,410	$188,160	$580,230	$481,810
Htr	Implementation cost	$458,640	$0	$0	$0	$458,640	$458,640
	Total costs (risk-adjusted)	**$458,640**	**$198,660**	**$193,410**	**$188,160**	**$1,038,870**	**$940,450**

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the interviewed organization expects risk-adjusted total costs to be a PV of less than $940,000.

Ongoing Costs

Annual costs include HighBond subscription and services costs, plus internal resource costs to manage and support the platform.

HighBond subscription costs are estimated to be $60,000 per year based on various levels of required access, ranging from advanced users to other employees that may need casual access to HighBond to review or save documentation, plus some added HighBond services to help with report creation, data connection, and other management tasks (which are less needed in later years as the organization is more proficient).

Internal resource time needed from each compliance team member is a about two days per week, though the team is just two people, reviewing reports, setting up new templates, answering questions, providing a training overview for new employees, etc. The average compliance manager salary is $70 per hour.

Given that internal resource costs may vary over time, Forrester adjusted this benefit by 10%. Refer to Appendix A for more information about Forrester's approach to risk adjustment.

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

Ongoing Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
G1	HighBond licensing			$60,000	$60,000	$60,000
G2	HighBond services			$20,000	$15,000	$10,000
G3	Internal organization FTE managing and monitoring HighBond			2	2	2
G4	Internal organization hours per week spent managing and monitoring HighBond (per FTE)			15	15	15
G5	Average hourly salary (fully burdened)			$70	$70	$70
Gt	Ongoing costs	G1+G2+(G3*G4*G5*52)	$0	$189,200	$184,200	$179,200
	Risk adjustment	↑5%				
Gtr	**Ongoing costs (risk-adjusted)**		**$0**	**$198,660**	**$193,410**	**$188,160**

The manufacturer estimates annual costs are between $188,100 and $199,000 per year, and add up to a risk-adjusted, three-year present value of less than $482,000.

Implementation Costs

To implement HighBond the manufacturer spent about a year planning, reviewing, and migrating data, communicating process and policy changes, setting up new data monitoring connections and reports, and training others on new processes. Implementation required approximately three FTEs — the compliance team spent a lot of their time on this project, as well as a variety of IT and business managers and resources as needed. Using the same $70 per hour average salary, and applying a 5% risk adjustment to allow for underestimated time estimates, implementation costs add up to nearly $459,000.

Total implementation and deployment time for three FTEs: **12 months**

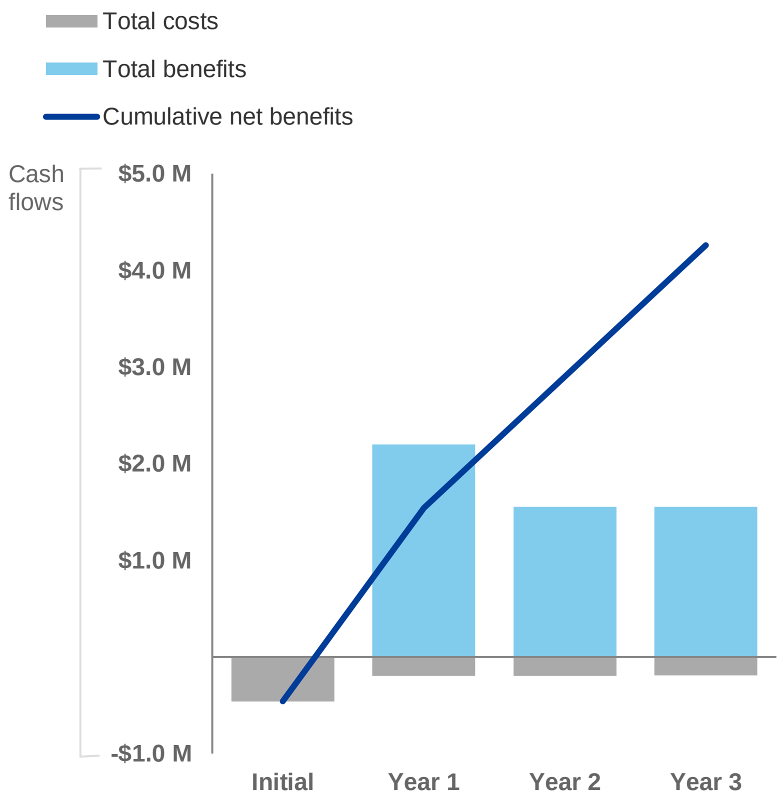
Implementation Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
H1	Implementation period duration (months)		12			
H2	Employees (FTE) involved		3			
Ht	Implementation cost	H2*G5*2,080	$436,800	$0	$0	$0
	Risk adjustment	↑5%				
Htr	**Implementation cost (risk-adjusted)**		**$458,640**	**$0**	**$0**	**$0**

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 interviewed 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 Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	($458,640)	($198,660)	($193,410)	($188,160)	($1,038,870)	($940,450)
Total benefits	$0	$2,196,900	$1,550,900	$1,550,900	$5,298,700	$4,444,131
Net benefits	($458,640)	$1,998,240	$1,357,490	$1,362,740	$4,259,830	$3,503,681
ROI						373%

About Galvanize

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

Galvanize builds award-winning, cloud-based security, risk management, compliance, and audit software to drive change in some of the world's largest organizations. Galvanize is on a mission to unite and strengthen individuals and entire organizations through the integrated HighBond software platform.

Within the HighBond platform, you'll find the following products:

- **RiskBond:** Integrated risk management software that identifies, assesses, responds to, and monitors your enterprise risks.
- **ComplianceBond:** Software to simplify and centralize regulatory compliance management, minimize risk exposure, and share one-click, real-time reporting.
- **ControlsBond:** Automate your manual and repetitive internal controls work with this software to reduce costs and increase assurance.
- **AuditBond:** Audit management software for audit workflows — from planning, risk assessments, and fieldwork to analytics, issue management, and reporting.
- **FraudBond:** Software that uses data automation to detect, prevent, and remediate fraud and corruption.
- **ITGRCBond:** Workflow-based IT risk and compliance management software that streamlines IT assessment activity.
- **CyberBond:** Consolidate and simplify your remediation management in one single software platform.
- **PolicyBond:** Automate the entire policy management life cycle, from drafting to eventual revision and retirement with this software.
- **ContinuityBond:** Software to help maintain effective business continuity planning, reduce risk exposure, and increase the ability to plan and respond.
- **ThirdPartyBond:** End-to-end, automated, and continuous vendor risk management and reporting software.
- **IncidentBond:** Automated security incident management software to centrally process and route security information and event management (SIEM) and security tool data for triage and resolution based on event rules.
- **ACL Robotics:** Software that transforms data into real-time insight and action through automation.

With more than 7,000 customer organizations in 140 countries, Galvanize is connecting teams in 60% of the Fortune 1,000, 72% of the S&P 500, and hundreds of government organizations, banks, manufacturers, and healthcare organizations. Whether these professionals are managing threats, assessing risk, measuring controls, monitoring compliance, or expanding assurance coverage, HighBond automates manual tasks, blends organization-wide data, and broadcasts it in easy-to-share dashboards and reports. But Galvanize doesn't just make technology — it provides tools that inspire individuals to achieve great things and do heroic work in the process.

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 C: Endnotes

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[1] Source: "Build The Business Case For GRC," Forrester Research, Inc., November 29, 2018.