

A Forrester Total Economic Impact™
Study Commissioned By Billtrust
January 2021

The Total Economic Impact™ Of Billtrust

Cost Savings And Business Benefits
Enabled By Billtrust

Table Of Contents

Executive Summary	1
Key Findings	1
TEI Framework And Methodology	4
The Billtrust Customer Journey	5
Interviewed Organization	5
Key Challenges	5
Key Results	6
Analysis Of Benefits	7
Invoice Transaction Savings	7
Cash Application Savings	8
Payment Savings	9
DSO And Bad Debt Savings	10
Unquantified Benefits	12
Flexibility	12
Analysis Of Costs	13
Billtrust Platform Fees	13
Internal Deployment Costs	13
Training Costs	14
Financial Summary	15
Overview: Billtrust	16
Appendix A: Total Economic Impact	17
Appendix B: Invoice Transaction Details	18
Appendix C: Endnotes	18

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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

To be successful in the age of the customer, businesses need to focus on the technologies, systems, and processes for winning, serving, and retaining customers. Supporting this approach are critical back-office processes, such as accounts receivable (AR).¹ Forrester defines AR e-invoicing as: the presenting of electronic invoices to customers; tracking the status of presented invoices; receives advance payment notices; and the support of dynamic discounting.²

Billtrust provides a full suite of order-to-cash solutions with integrated B2B Payments that help its customers become more efficient and accurate in their AR functions, i.e., Billtrust improves the accuracy and speed of cash application, facilitates the digitalization of paper invoicing, and enables steep interchange merchant savings. Billtrust commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Billtrust. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the Billtrust on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed one customer with several years of experience using Billtrust Cash Application, Invoicing, and Payments.

Prior to using Billtrust, the interviewed customer relied on in-house FTEs to manually perform cash application and print and send invoices. These processes were labor intensive, with high variable costs, and they did not meet the shifting expectations of customers in a digital-first world.

Key Findings

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

- › **Invoice transaction savings of \$322K.** Billtrust enabled the organization to transition invoices from print to e-invoice. On average, an e-invoice costs 88% less to send as it requires no printing costs, labor, or postage.
- › **Cash application savings of \$359K.** The organization drastically reduced the time and effort required to apply the various types of incoming payments to the correct receivable and account. With Billtrust, the organization achieved 80% straight-through processing of cash application activities, allowing the firm to reduce required headcount for the operation by 50%.
- › **Projected payment savings of \$422K.** The organization is currently deploying Billtrust Payments, which will enable them to accept the preferred payment types of their customers — from automated clearing house (ACH) to credit cards, emails, and wires. Transitioning customers from check to ACH drastically reduces the average cost of collections. Furthermore, by collecting and reporting robust data back to credit card processors, the organization will recognize significant interchange optimization discounts.

Key Benefits



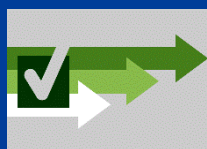
Invoice transaction savings:
\$322,403



Cash application savings:
\$359,131



Payment savings:
\$421,738



DSO and bad debt savings
\$46,346



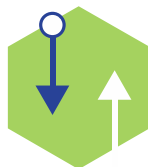
ROI
390%



Benefits PV
\$1,149,618



NPV
\$915,060



Payback
<6 months

- › **Projected days sales outstanding (DSO) and bad debt savings of \$46K.** Having an electronic and efficiently managed payment collections process will enable the organization to reduce the average DSO of receivables, freeing up capital that can be allocated towards core business functions. Additionally, by lowering the average amount of open receivables, the organization reduces the overall amount of bad debt.

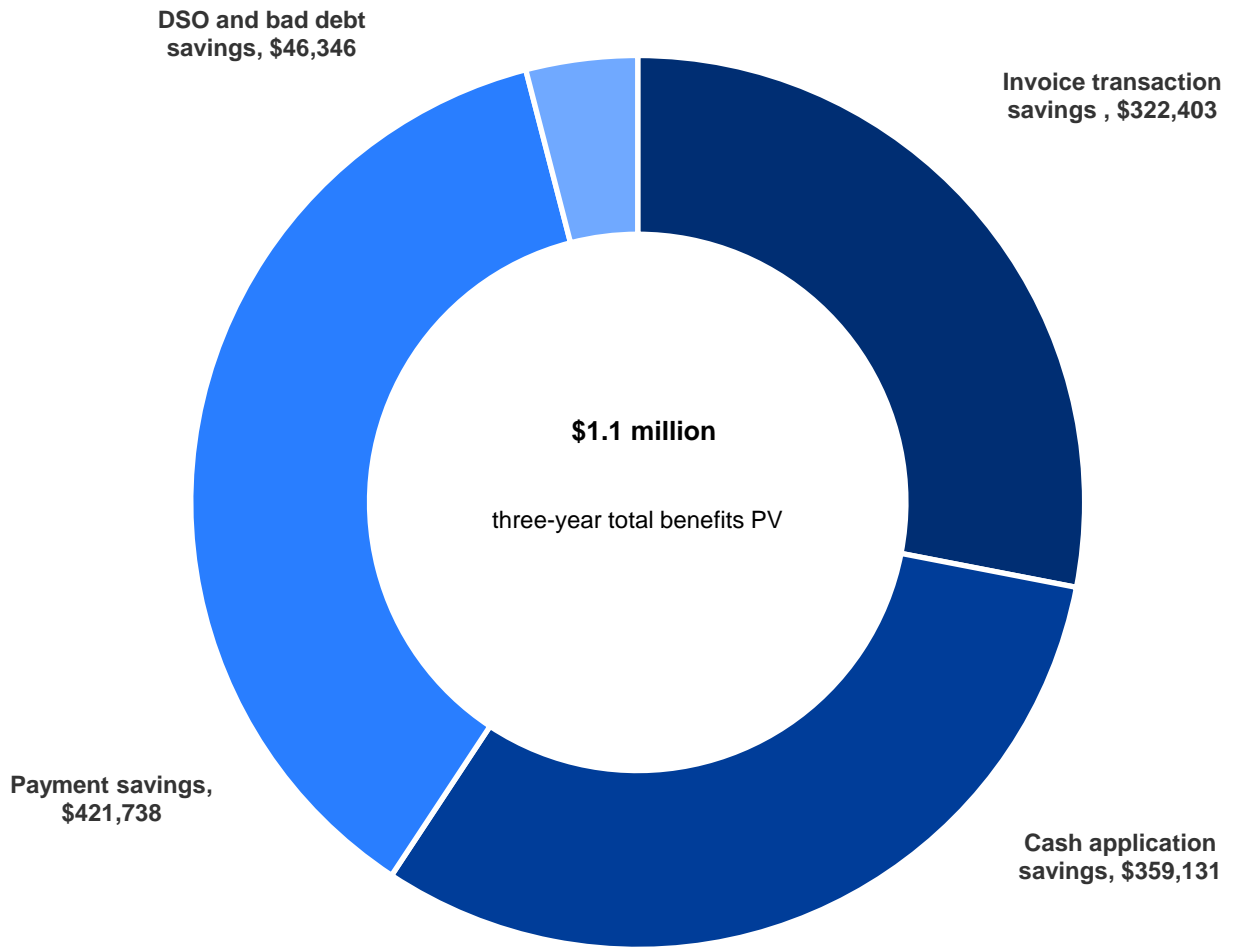
Unquantified benefits. The interviewed organization experienced the following benefits, which are not quantified for this study:

- › **Improved customer experience and satisfaction.** The organization improved customer satisfaction by offering customers the payment types they preferred. Furthermore, by digitizing and automating AR processes with Billtrust, the organization improved the speed and accuracy of invoicing.
- › **Improved employee morale.** While some employees were made redundant, the remaining employees were able to move from repetitive tasks to more business-critical work.
- › **Reduction in write-downs.** With Billtrust, the organization has better documentation and visibility into outstanding payments. The ability to quickly send electronic invoices reduces the likelihood of lost or forgotten bills, which could lead to collection issues and write-downs.
- › **Increased digitalization.** Continuing digitalization with Billtrust enables the organization to enjoy additional future savings by reducing spend on physical inputs and streamlining processes.
- › **Increased disaster readiness.** Billtrust's automated AR, reduced dependency on in-house mailing and printing, and alternate payment channels can provide new cash flow and stability during crises.

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

- › **Billtrust fees.** The organization pays variable fees per invoice sent through Billtrust, as well as annual platform fees for the use of Cash Application, Invoicing, and Payments.
- › **Development costs.** The organization used a freelance developer to help integrate Billtrust with its existing enterprise resource planning (ERP) system, as well as dedicating one internal FTE to oversee the project.
- › **Training costs.** The organization trained its internal users for one day on the usage of Billtrust and the benefits of driving e-adoption amongst customers.

Forrester's interview with the customer and subsequent financial analysis found that the interviewed organization experienced benefits of \$1,149,618 over three years versus costs of \$234,558, adding up to a net present value (NPV) of \$915,060 and an ROI of 390%.



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 Billtrust.

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 Billtrust can have on an organization:



DUE DILIGENCE

Interviewed Billtrust stakeholders and Forrester analysts to gather data relative to Cash Application, Invoicing, and Payments.



CUSTOMER INTERVIEW

Interviewed one organization using Billtrust 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 Billtrust'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 Billtrust 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 Billtrust.

Billtrust 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.

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

The Billtrust Customer Journey

BEFORE AND AFTER THE BILLTRUST INVESTMENT

Interviewed Organization

For this study, Forrester interviewed a Billtrust customer:

- › It is a heavy equipment dealer based in the United States. It has 23 branch offices, over 1,000 employees, and more than \$500 million in annual revenue.
- › Prior to Billtrust, the organization had internally managed cash application and invoicing processes. The catalyst for investing in Billtrust's Invoicing module was the deployment of a new ERP system, which led to issues with their invoicing operations. The organization quickly realized it needed a more efficient way to send invoices and receive payments.
- › The organization began its Billtrust usage with the Invoicing module, and it quickly added the Cash Application module upon seeing the benefits of digitizing back-office operations.
- › Over the next year, the organization will be expanding its deployment and usage of Billtrust's Payments.

Key Challenges

The organization shared the following issues, drivers, challenges, goals, and opportunities:

- › **Automate cash application process.** The organization used contractors to complete the cash application process. Due to the uneven nature of payments and the disparate forms of payment and communication, employees were frequently overloaded. The organization required four contractors to manually perform cash application. The corporate credit manager explained: "Monday is a big day for us. We get about 500 checks on Monday, and another 500 throughout the week. We also get EFT and wire payments and some credit cards. But for the checks, for the lockbox [payments], it would take us an entire week to manually post all those checks from Monday. We would work on it on Monday, and then on Tuesday we would do Tuesday, and then go back to [the] work [from] Monday. Then on Wednesday, we'd do Wednesday and then go back to [the] work [from] Monday. It would take us the whole week just to get that load from Monday done."
- › **Reduce internal effort and costs related to invoicing.** Prior to Billtrust, the organization used internal resources to manually print and send invoices to customers. The organization wanted a way to reduce the variable and fixed internal costs of sending invoicing through non-digital means.
- › **Changing customer payment preferences.** As a new generation of managers took over with their customers' accounts payable function, the firm recognized that their clients increasingly expected to be invoiced and to pay electronically. The organization needed to provide their customers with the digital experience they demanded, or risk losing business to other firms that have these capabilities.

"The decision to go with Billtrust and their Cash Application was a simple way to enhance our productivity and streamline the posting of payments. We have recently expanded our commitment to our customers, [by] allowing them to pay online and enhancing, once again, our ability to post payments and reconcile accounts faster."

VP of finance, heavy equipment dealer



"For years, we relied on the bank to supply the daily lockbox payments to a downloadable file, and the same would apply to EFT and ACH payments. The manpower and the time consumed by this manual process ate up any spare time for the accounts receivable clerks. Billtrust and the Cash Application was a solution allowing our staff to post and allocate payments in the same day. Monday's lockbox [payments] took a week to get allocated, now [they] take less than 4 hours. This allows two clerks to handle three types of payments through the cash application [EFT, ACH, lockbox, and credit card payments]."

VP of finance, heavy equipment dealer



Key Results

The interview revealed that key results from the Billtrust investment include:

- › **Accelerated cash application process and reduced contractor headcount.** Billtrust automates much of the cash application process, with 80% of cash application activities being automatically processed. Furthermore, the organization recognized great value by reducing the necessary headcount from four FTEs to just one. This eliminated the need for the three contractors it used for manual keying prior to investing in Billtrust. The remaining FTE resource on the cash application team was able to process a significantly higher volume of payments than before using Billtrust, as the platform reduced required effort for exception handling.
- › **Reduced overall invoicing spend.** With Billtrust, the organization drove higher customer adoption of electronic invoices, which has a far lower variable cost than print invoices do. Moreover, the organization pays a lower per-invoice fee for residual print invoices than it would processing and sending them internally. As the corporate credit manager explained: “When we first went live, we tested with 100 customers, and we had 40 right off the bat that were already in the Billtrust system and we could send to electronically. Right there we had savings, and that’s going to go on forever because we never need to send them a paper invoice again. It’s not only the paper, it’s the manpower of someone having to print them, pull them, put them in an envelope, and mail them. That’s all gone.”
- › **Optimized interchange fees and reduced cost to collect.** The organization is currently deploying Billtrust Payments, which will facilitate Tier II and Tier III interchange data savings. The organization projects to save both on the per-transaction merchant fees as well as overall interchange costs. Additionally, with Billtrust the organization can accept ACH payments, which have a lower cost to collect than wire or check payments.
- › **Reduced DSO and bad debt.** Having electronic invoicing accelerates the speed and accuracy of billing, reducing the time for customers to make payments. By reducing the overall amount of open accounts receivable, the organization also reduces the likelihood of outstanding payments becoming bad debt.
- › **Improved customer experience.** With Billtrust, the organization can meet the changing demands of its customer base, more and more of whom no longer want to receive printed invoices. The corporate credit manager stated: “In our industry the customers are becoming younger, and they want electronic payments. They want electronic invoices and statements. They don’t want to have to wait for the mail to get to them. They want it in their inbox, and [to] be able to process it quickly.”

“Billtrust has an excellent support team. We rarely need assistance, but when we do it is resolved quickly. Updates are posted to the portal, and [they] are very informative.”

VP of finance, heavy equipment dealer



“Many of our customers have been asking for this for years. Billtrust has given us a way to let our customers be in control of when and how they interact with us.”

Corporate credit manager, heavy equipment dealer



“For me, the value that Billtrust brings is using technology to create efficiencies and synergies that allows us to focus our human resource on higher-value activities.”

Corporate credit manager, heavy equipment dealer



Analysis Of Benefits

QUANTIFIED BENEFIT DATA

Total Benefits						
REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Invoice transaction savings	\$123,551	\$137,459	\$128,416	\$389,427	\$322,403
Btr	Cash application savings	\$140,434	\$144,643	\$148,971	\$434,048	\$359,131
Ctr	Payment savings	\$156,393	\$172,066	\$182,826	\$511,285	\$421,738
Dtr	DSO and bad debt savings	\$8,010	\$17,453	\$32,796	\$58,259	\$46,346
	Total benefits (risk-adjusted)	\$428,388	\$471,621	\$493,009	\$1,393,018	\$1,149,618

Invoice Transaction Savings

The organization uses Billtrust to manage all print and electronic invoicing. Prior to using Billtrust, all invoices were sent manually using internal resources. Billtrust enables the organization to send electronic invoices to customers that prefer them and to offer print invoices at a lower variable cost.

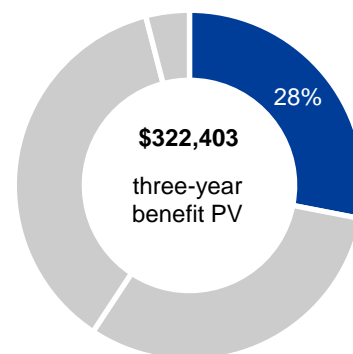
- › Prior to using Billtrust, the organization incurred an estimate internal cost of \$0.79 per invoice. This cost includes print cartridges, paper, postage, envelopes, and labor. The organization also incurred an annual mail equipment amortization of \$10,000.
- › With Billtrust, the organization pays between \$0.62 for print invoices, \$0.10 for email invoices, and \$0.23 per e-bill.
- › Billtrust provides the organization with the ability to send electronic invoices to customers that prefer them. Electronic adoption has increased since deployment, from 42% to 49%. While the organization can educate employees and customers to drive adoption, Billtrust is able to identify customers that already receive electronic invoices and to automatically convert their remaining paper invoices.
- › The corporate credit manager stated: “We used to do [invoicing] in-house. We printed invoices, we folded invoices, we put that through the postage machine and mailed them.” The corporate credit manager explained further: “We’ve increased our [invoice] accuracy. Billtrust doesn’t get tired on Friday. Billtrust can’t come into work hungover. It works exactly the right way, every time, all the time.”

Forrester recognizes that certain variables will impact the invoice savings that organizations accrue. Specific risk considerations include:

- › Current internal cost to send invoices.
- › Volume of international billing.
- › Ability to drive e-adoption rates.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \$322,403.

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 \$1,149,618.



Invoice savings: **28%** of total benefits

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.

Invoice Transaction Savings: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
A1	Annual invoices sent		342,031	350,107	312,339
A2	Per unit postage cost		\$0.52	\$0.52	\$0.52
A3	Per unit printing cost	2 pages average	\$0.20	\$0.20	\$0.20
A4	Per unit envelope cost		\$0.05	\$0.05	\$0.05
A5	Per unit ink cost	$(\$100/10,000)*2$	\$0.02	\$0.02	\$0.02
A6	Mail equipment amortization		\$10,000	\$10,000	\$10,000
A7	Transaction cost prior state (rounded)	$A1*(A2+A3+A4+A5)+A6$	\$280,205	\$286,585	\$256,748
A8	Transaction cost with Billtrust	Appendix B	\$150,151	\$141,891	\$121,573
At	Invoice transaction savings	A7-A8	\$130,054	\$144,694	\$135,175
	Risk adjustment	↓5%			
Atr	Invoice transaction savings (risk-adjusted)		\$123,551	\$137,459	\$128,416

Cash Application Savings

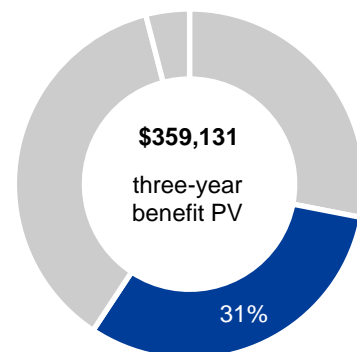
One of the key factors for the organization choosing Billtrust was simplifying and automating arduous manual processes. One such process was cash application, which required significant effort on a weekly basis. Employees received various forms of payments from numerous customers, and they needed to manually match these to invoices using a myriad of faxes and emails. The corporate credit manager explained that performing cash application for the bulk of checks they received on Monday took an entire week.

- › Upon adopting Billtrust Cash Application, the organization recognizes immediate results. Billtrust automates the processing of 80% of all cash application activities. Furthermore, Billtrust greatly reduces the amount of effort required to complete remaining cash application activities, as its UI accelerates the speed of exception handling.
- › The organization eliminated three contractor roles related to cash application, which is a 50% reduction in contractor staff. Contractors earned an average of \$23 to \$25 per hour.
- › The organization reallocates time of permanent employees to more business-critical tasks.

Cash application savings will vary with:

- › Current volume and type of payments.
- › Prevailing labor rates.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of \$359,131.



Cash application savings: **31%** of total benefits



50% reduction in cash application staff

Cash Application Savings: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	FTEs required for manual cash application		6	6	6
B2	Average hourly rate for cash application FTE	3% inflation (rounded)	\$23.69	\$24.40	\$25.13
B3	Reduction in required labor due to automatic allocation		50%	50%	50%
Bt	Cash application savings	$B1*(B2*2,080)*B3$	\$147,826	\$152,256	\$156,811
	Risk adjustment	↓5%			
Btr	Cash application savings (risk-adjusted)		\$140,434	\$144,643	\$148,971

Payment Savings

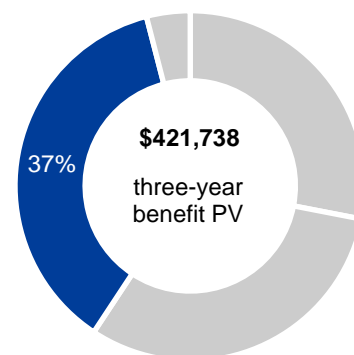
The organization deploys Billtrust's Payments module, which allows it to accept any form of payment in a cost-effective manner. Offering a multitude of payment options improves customer satisfaction by meeting customer preferences, and it enables the organization to transition more invoices to lower cost payment methods, like ACH.

- › Over the three-year period, the organization projects to increase the number of invoices paid by ACH from 47% to 56%, while decreasing the amount of invoices paid by check from 48% to 38%. The cost to receive a payment by ACH is \$0.10, versus \$1.70 for check or \$14.00 per wire.
- › With Billtrust, the cost to receive credit payments declines to 1.90% — previously, the organization paid 2.59% to its credit card processors for receiving payments. Billtrust lowers credit card transaction costs by helping the organization to collect and share Level II and Level III data. This reduces the interchange rates paid to processors.
- › Billtrust adheres to PCI compliance, and takes the risk of collecting and storing sensitive data out of the organization's hands.³
- › Forrester assumes a 3:1 ratio of payments to transactions.

Forrester recognizes that certain factors may impact payment savings. Specific considerations include:

- › Volume of transactions and baseline ratios for payment types.
- › Baseline merchant fees.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$421,738.



Payment savings: **37%**
of total benefits

"Cash application is truly remarkable. We were able to downsize headcount and finish all our allocations within a couple of hours."

Corporate credit manager, heavy equipment dealer



Payment Savings: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
C1	Number of invoices paid via ACH before state	$(A1/3)*33\%$	37,623	38,512	34,357
C2	Number of invoices paid via ACH with Billtrust	Y1: $(A1/3)*47\%$ Y2: $(A1/3)*51\%$ Y3: $(A1/3)*56\%$	53,585	59,518	58,303
C3	Cost of receiving via ACH		\$0.10	\$0.10	\$0.10
C4	Number of invoices paid via check before state	$(A1/3)*63\%$	71,827	73,522	65,591
C5	Number of invoices paid via check with Billtrust	Y1: $(A1/3)*48\%$ Y2: $(A1/3)*43\%$ Y3: $(A1/3)*38\%$	54,725	50,182	39,563
C6	Cost of receiving via check		\$1.70	\$1.70	\$1.70
C7	Number of invoices paid via wire before state	$(A1/3)*2\%$	2,280	2,334	2,082
C8	Number of invoices paid via wire with Billtrust	$(A1/3)*2\%$	2,280	2,334	2,082
C9	Cost of receiving via wire		\$14	\$14	\$14
C10	Credit card volume prior state		\$21,201,832	\$22,261,923	\$23,375,019
C11	Credit card volume with Billtrust		\$21,201,832	\$22,261,923	\$23,375,019
C12	Cost of receiving via credit card prior state		2.59%	2.59%	2.59%
C13	Cost of receiving via credit card with Billtrust		1.90%	1.90%	1.90%
C14	Acquiring fee		0.2%	0.2%	0.2%
C15	Cost of receivables prior state	$(C1*C3)+(C4*C6)+(C7*C9)+ (C10*C12)+(C10*C14)$	\$749,321	\$782,624	\$796,255
C16	Cost of receivables with Billtrust	$(C2*C3)+(C5*C6)+(C8*C9)+ (C11*C13)+(C11*C14)$	\$575,552	\$591,438	\$593,114
Ct	Payment savings	C15-C16	\$173,770	\$191,184	\$203,140
	Risk adjustment	↓10%			
Ctr	Payment savings (risk-adjusted)		\$156,393	\$172,066	\$182,826

DSO And Bad Debt Savings

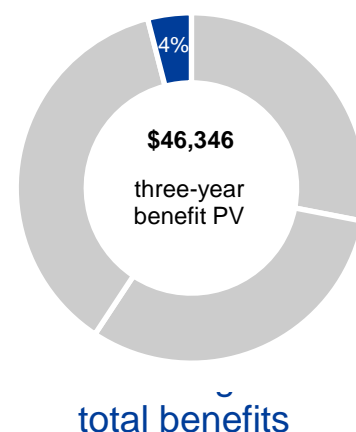
E-invoices are generated and sent faster than traditional mail, shortening the time it takes for customers to receive the invoice and respond. With Billtrust, the organization automates much of the cash application process and accelerates the speed and accuracy of reconciling payments with invoices. By accelerating the payment-to-cash process, the organization can allocate capital to core initiatives, further growing its business.

- › With the accelerated speed of transactions and cash application, the organization reduces its average DSO by 2 to 8% over the three-year period. Previously, the organization's average DSO was 33 days.
- › By lowering its overall open receivables, the organization is able to reduce its total write-offs.
- › The organization reduces the overall risk of write-offs, as it has historically experienced more disputes the longer a receivable is outstanding.
- › Forrester assumes an annual revenue growth rate of 2.5% and a weighted average cost of capital (WACC) of 4.0%.

Forrester recognizes that certain factors may impact payment savings. Specific considerations include:

- › Historic DSO and bad debt rates.
- › Industry, customer relations, and ability to collect receivables.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$46,346.



DSO And Bad Debt Savings: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
D1	Annual revenue	2.5% growth	\$550,000,000	\$563,750,000	\$577,843,750
D2	DSO prior state		33	33	33
D3	Open AR prior state	$D1 \cdot D2 / 365$	\$49,726,027	\$50,969,178	\$52,243,408
D4	DSO with Billtrust		32.3	31.5	30.2
D5	Open AR with Billtrust	$D1 \cdot D4 / 365$	\$48,671,233	\$48,652,397	\$47,810,634
D6	WACC		4.0%	4.0%	4.0%
D7	Daily cost of capital prior state	$(D3 \cdot D6) / 365$	\$5,449	\$5,586	\$5,725
D8	Daily cost of capital with Billtrust	$(D5 \cdot D6) / 365$	\$5,334	\$5,332	\$5,240
D9	Opportunity cost savings	$(D7 \cdot D2) - (D8 \cdot D4)$	\$7,529	\$16,380	\$30,677
D10	Percentage of bad debt prior state		0.13%	0.13%	0.13%
D11	Percentage of bad debt with Billtrust		0.13%	0.13%	0.13%
D12	Bad debt savings	$(D3 \cdot D10) - (D5 \cdot D11)$	\$1,371	\$3,012	\$5,763
Dt	DSO and bad debt savings	$D9 + D12$	\$8,900	\$19,392	\$36,440
	Risk adjustment	↓10%			
Dtr	DSO and bad debt savings (risk-adjusted)		\$8,010	\$17,453	\$32,796

Unquantified Benefits

The interviewed organization experienced the following benefits, which are not quantified for the study:

- › **Improved customer experience and satisfaction.** The organization improved customer satisfaction by offering the payment types they preferred. Speed and accuracy of back-office processes were improved, ensuring customers were not troubled with invoicing issues. Furthermore, e-invoicing allows a more granular dispute system for customers.
- › **Improved employee morale.** Remaining employees were able to move from repetitive tasks to more business-critical work. The corporate credit manager stated: “By Friday people had lost all attention. Now we have them adding value, working on other important projects.”
- › **Reduction in write-downs.** The corporate credit manager explained: “We do a better job of documenting things and getting things done. We are much more responsive to customers because of Billtrust.”
- › **Increased digitalization.** The continued digitalization of cash application and invoicing activities serves to save the organization further in the future. Converting to digital can further reduce the firm’s spending on physical inputs required to print and sent bills, as well as time and manpower for application.
- › **Increased disaster readiness.** Disruptions in normal cash flow due to crises like COVID-19 can be partially mitigated with the range of options Billtrust allows for payment. Automating AR, reducing in-house dependencies on printing and mailing invoices, and adding new payment channels can help keep business moving during crises.

Flexibility

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 Billtrust and later realize additional uses and business opportunities, including:

- › **Implementation of a CRM module.** The organization plans to implement Billtrust’s CRM module in the near future. With this module, the organization expects to track accounts and use the data to identify their best customers and problem accounts — extending or tightening credit in accordance with account payment history.

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

“We are business-as-usual during COVID. We have been here to serve our internal and external customers with ease. We are entering our third year using [Billtrust’s] Cash Application, and we knew that we could support our customers whether we were in an office or at home. That is a big plus for us and our customers. Our customers kept asking for a way to pay online. They did not want to write checks anymore. We added the ability for our customers to pay online via ACH or credit card in July of 2020. Little did we know at that time how pertinent that function was! We have seen the number of online payments triple since July.”

VP of finance, heavy equipment dealer



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
Dtr	Billtrust platform fees	\$99,225	\$48,510	\$48,510	\$48,510	\$244,755	\$219,862
Etr	Internal deployment costs	\$11,025	\$0	\$0	\$0	\$11,025	\$11,025
Ftr	Training costs	\$3,671	\$0	\$0	\$0	\$3,671	\$3,671
	Total costs (risk-adjusted)	\$113,921	\$48,510	\$48,510	\$48,510	\$259,451	\$234,558

Billtrust Platform Fees

The organization pays implementation fees for Billtrust Invoicing, Cash Application, and Payments. The organization pays an annual software-as-a-service (SaaS) subscription fee for the Cash Application module.

Variable invoicing fees are not included in the Costs section of this report, as they are accounted for when determining the net benefit of invoices in the Invoice Transaction Savings benefit section.

Readers may experience varying Billtrust fees based on license type and usage. Billtrust offers several deployment options for varying use cases.

To account for these risks, Forrester adjusted this cost upwards by 5%, yielding and three-year, risk-adjusted total PV of \$219,862.

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 \$234,558.

Billtrust Platform Fees: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
E1	Billtrust invoicing fees		\$47,180			
E2	Billtrust cash app fees		\$28,420	\$46,200	\$46,200	\$46,200
E3	Billtrust payment costs		\$18,900			
Et	Billtrust fees	E1+E2+E3	\$94,500	\$46,200	\$46,200	\$46,200
	Risk adjustment	↑5%				
Etr	Billtrust fees (risk-adjusted)		\$99,225	\$48,510	\$48,510	\$48,510

Internal Deployment Costs

The organization dedicated one FTE to overseeing the deployment of Billtrust. This FTE spent a total of 120 hours on deployment activities.

The organization required 40 hours of freelance developer time to create custom code for their deployment. The organization paid \$150 per hour for this service.

Forrester notes that in the time since this customer's deployment, Billtrust has launched a newer version of their platform that requires less deployment and implementation time.

Forrester recognizes that the size and complexity of a deployment may impact the time and resources required for implementation. Further, banks and other external agencies may cause deviations in time to implementation.

To account for this risk, Forrester adjusted this cost upwards by 5%, yielding a three-year, risk-adjusted total PV of \$11,025.

Internal Deployment Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
F1	Developer hours to integrate with ERP		40			
F2	Hourly developer rate		\$150			
F3	Developer costs	$F1 \times F2$	\$6,000			
F4	FTEs overseeing deployment		1			
F5	Hours spent on deployment		120			
F6	FTE hourly rate		\$37.50			
Ft	Internal deployment costs	$F3 + (F4 \times F5 \times F6)$	\$10,500			
	Risk adjustment	↑5%				
Ftr	Internal deployment costs (risk-adjusted)		\$11,025			

Training Costs

The organization spent a day training the 23 primary users within accounting. The organization intends to develop webinars to train new users in the future, as well as educate employees on the importance of pushing electronic adoption amongst customers.

Forrester recognizes that training costs may vary based on size of teams, existing skillsets, and organizational needs.

To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of \$3,671.

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.

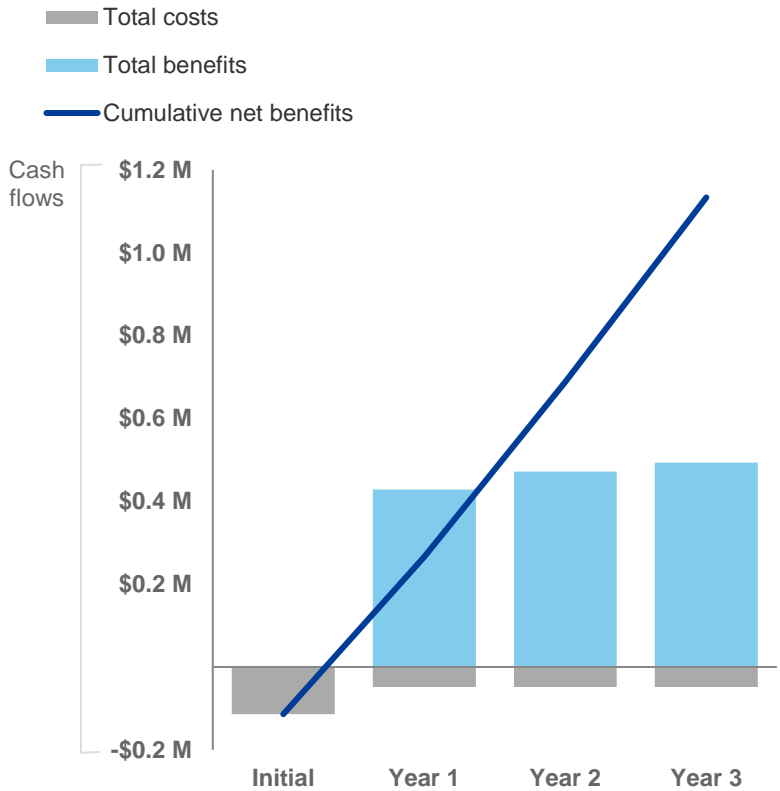
Training Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
G1	Billtrust users		23			
G2	Training hours		8			
G3	Hourly rate		\$19			
Gt	Training costs	$G1 \times G2 \times G3$	\$3,496			
	Risk adjustment	↑5%				
Gtr	Training costs (risk-adjusted)		\$3,671			

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 interviewed organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.



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

Cash Flow Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	(\$113,921)	(\$48,510)	(\$48,510)	(\$48,510)	(\$259,451)	(\$234,558)
Total benefits	\$0	\$428,388	\$471,621	\$493,009	\$1,393,018	\$1,149,618
Net benefits	(\$113,921)	\$379,878	\$423,111	\$444,499	\$1,133,567	\$915,060
ROI						390%
Payback period						<6 months

Overview: Billtrust

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

About Billtrust

[Billtrust](#) is a leading provider of cloud-based software and integrated payment processing solutions that simplify and automate B2B commerce. Accounts receivable is broken and relies on conventional processes that are outdated, inefficient, manual and largely paper-based. Billtrust is at the forefront of the digital transformation of AR, providing mission-critical solutions that span [credit decisioning and monitoring](#), [online ordering](#), [invoice delivery](#), [payments and remittance capture](#), [invoicing](#), [cash application](#), and [collections](#). For more information, visit [Billtrust.com](#).

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: Invoice Transaction Details

Invoice Type			
FORMAT	YEAR 1	YEAR 2	YEAR 3
Print	198,842	188,687	160,029
Email	95,651	84,193	50,969
E-bill	46,649	76,479	100,962

Billtrust Transaction Fees			
BILLTRUST FEE	YEAR 1	YEAR 2	YEAR 3
Per unit postage	\$0.43	\$0.43	\$0.43
Envelope and first page	\$0.20	\$0.20	\$0.20
Additional page	\$0.155	\$0.155	\$0.155
Email fee	\$0.10	\$0.10	\$0.10
E-bill page fee	\$0.02	\$0.02	\$0.02
Processing, currency, other fees	\$6,685	\$7,093	\$6,817

Appendix C: Endnotes

¹ Source: "Vendor Landscapes: eProcurement, eSourcing, eInvoicing, And Spend Analysis, 2016 To 2017," Forrester Research, Inc., March 23, 2017.

² Source: Definition of AR eInvoicing (<https://www.forrester.com/staticassets/glossary.html>).

³ PCI: Payment Card Industry Security Standard.