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The Total Economic Impact™ Of Esker DeliveryWare

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Executive Summary

“We needed a way to become more efficient and to reduce our dependency on paper,” explained one of the managers interviewed for this study, referring to one of the key drivers behind the Esker DeliveryWare investment. “Otherwise we could not grow; we could not continue to be handicapped by the paper. Going paperless was the number-one catalyst.”

In 2008, Esker commissioned Forrester Consulting to examine the total economic impact and potential return on investment (ROI) enterprises may realize by deploying Esker DeliveryWare. Esker DeliveryWare automates the flow of business transaction data into and out of ERP applications and other enterprise systems. This study shows the financial effect of an investment in Esker DeliveryWare in the sales order departments at a \$20 billion multinational manufacturer.

This customer’s trade partner order processing group uses Esker DeliveryWare to automate the processing of faxed and emailed documents through the sales order cycle. Orders and other documents are automatically archived and attached to the corresponding SAP order record, thus easing document retrieval. Order-related documents are also electronically combined and archived.

In-depth interviews with this Esker customer found that the enterprise implementation achieved labor cost savings, reduced paper consumption and related costs, and reduced the costs of off-site document storage.

Purpose

This study provides readers with a framework to evaluate the financial effect of Esker DeliveryWare on its organizations. Forrester will clearly show all calculations and assumptions used in the analysis. Readers should use this study to better understand and communicate a business case for investing in Esker DeliveryWare.

Methodology

Esker selected Forrester for this project because of its industry expertise in enterprise content management (ECM) and document-centric business process management, as well as Forrester’s Total Economic Impact™ (TEI) methodology. TEI not only measures costs and cost reduction (areas that are typically accounted for within IT) but also weighs the enabling value of a technology in increasing the effectiveness of overall business processes.

For this study, Forrester employed four fundamental elements of TEI in modeling Esker DeliveryWare:

1. Costs
2. Benefits to the entire organization
3. Flexibility
4. Risk

Given the increasing sophistication that enterprises have regarding cost analyses related to IT investments, Forrester’s TEI methodology serves the useful purpose of providing a complete picture of the *total* economic impact of technology investment decisions.

Approach

Forrester used a multistep approach for this study:

1. Forrester gathered data from existing Forrester research relative to Esker DeliveryWare and the document-centric business process management application market in general.
2. Forrester interviewed Esker executives to fully understand the value proposition of Esker DeliveryWare.
3. Forrester conducted a series of in-depth interviews within a large enterprise organization currently using the Esker DeliveryWare solution.
4. Forrester constructed a financial model representative of the interviews. This model can be found in the TEI Framework section below.

Key Findings

Forrester's study yielded several key findings:

- **ROI.** Based on the interviews with an Esker customer, Forrester constructed an ROI analysis illustrating the financial impact areas. As seen in Table 1, the risk-adjusted ROI for the Esker customer in this study is 128% with a breakeven point (payback period) of less than eleven months after deployment.
- **Benefits.** Principal benefits include annual labor cost savings of \$5 million over three years. Additional financial benefits were generated from lower consumption of paper and reduced off-site document storage.
- **Costs.** Significant cost categories include software license and maintenance of \$471,000 over three years, professional services fees of \$191,500, implementation labor costs of \$522,500, modest expenditures for server hardware, and training and system support labor costs of just under \$829,000.

Table 1 illustrates the risk-adjusted cash flow for the customer organization, based on data and characteristics obtained during the interview process. Forrester risk-adjusts these values to take into account the potential uncertainty that exists in estimating the costs and benefits of a technology investment. The risk-adjusted value provides a conservative financial summary point, incorporating any potential risk factors that may later affect the original cost and benefit estimates. For a more in-depth explanation of the risk adjustments used in this study, please see the "Risk" section below.

Table 1: Company ROI, Risk-Adjusted

Summary financial results	Original estimate	Risk-adjusted
ROI	148%	128%
Payback period (months)	9.4	10.7
Total costs (PV)	(\$1,868,234)	(\$1,951,172)
Total benefits (PV)	\$4,630,078	\$4,440,585
Total (NPV)	\$2,761,844	\$2,489,413

Source: Forrester Research, Inc.

Disclosures

The reader should be aware of the following:

- The study is commissioned by Esker and delivered by the Forrester Consulting group.
- Esker 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.
- The customer for the interviews was provided by Esker.
- Forrester makes no assumptions as to the potential return on investment that other organizations will receive. Forrester strongly advises that readers should use their own estimates within the framework provided in the report to determine the feasibility of an investment in Esker DeliveryWare.
- This study is not meant to be used as a competitive product analysis.

Esker DeliveryWare: Overview

According to Esker, the Esker DeliveryWare solution provides a single platform for automating the flow of business transaction documents directly into and out of ERP systems and other enterprise applications. Eliminating manual data entry and physical document handling saves time; reduces costs; and improves accuracy in business processes such as accounts payable, sales order processing, purchasing, and customer invoicing.

With the Sales Order Processing Module, the focus of this case study, organizations benefit from Esker DeliveryWare capabilities for receiving, entering, and tracking customer orders — encompassing automated capture and posting, routing for exception handling, and detailed reporting.

Esker DeliveryWare combines dynamic content capture with integrated workflow and process tracking to help ERP users address the challenges of manual data entry, manual paper routing, lack of coordination, and lack of transparency within traditional customer order processing as part of the order-to-cash cycle.

When a fax, email, paper, or electronic order arrives, Esker DeliveryWare captures data such as customer number, product part number, and due date for routing and indexing. Captured data is automatically validated against ERP data and then transferred to the ERP order management application.

An image of the sales order is directly linked to the new business transaction, allowing users to view original documents without leaving the ERP system whenever it may be necessary. The document may be physically stored within the Esker content management solution or other archiving systems. Confirmation can be automatically sent to the customer upon creation of the entry in the ERP system. The solution keeps track of all incoming documents all the way through to their creation in the ERP system, allowing process monitoring and control. In addition, the automation of the process guarantees its consistency.

Key features include:

- Automation of order details into an ERP system.
- Real-time availability of order status and transaction data.
- Consistent processing rules.
- Controlled exception handling for canceled transactions and blocked orders.
- Order validation including side-by-side view of original and captured data.
- Duplicate order checking.
- Process history and audit trail.
- Central point of information for all customer order management processes.
- Flexible, automated task routing.
- Minimized number of keystrokes to complete order entry.
- Reports on process time and volume, queued orders, exceptions and blocks, and delivery dates.

Analysis

As stated in the Executive Summary, Forrester took a multistep approach to evaluate the impact that implementing Esker DeliveryWare can have on an organization:

- Interviews with Esker product marketing and sales executives.
- In-depth interviews in a large enterprise currently using Esker DeliveryWare.
- Construction of a financial framework for the implementation of Esker DeliveryWare.

Customer Interview Highlights

The interviews conducted for this study uncovered the context of the customer's environment and several salient facts and insights:

- A key driver behind the customer's decision to invest in Esker DeliveryWare was the enterprise's need to become more efficient and to reduce its dependency on paper documents in the sales order processes. Without a solution to these time-consuming and bulky processes, the company's growth would be hindered. "We could not continue to be handicapped by the paper," explained one of the interviewees in the study. The need for sales order document automation accelerated with the prospect of a larger merger on the horizon. "We needed to become streamlined to integrate that business into ours."
- The organization profiled in this study processes 450,000 to 500,000 orders per year. The Esker system currently handles about 20%; the orders that do not come via EDI, phone or from a Web order form. The goal at this company is to increase the Esker system usage to over 50%.
- Esker DeliveryWare has been deployed to help the company meet the needs of a group of customers for which other electronic methods of ordering are not suited. Their largest customers will order via EDI. Small customers will order via the company's Web-based application. In between, as part of Phase 2 of this Esker DeliveryWare investment, was the creation of service to a segment of the customer base that has some kind of formal PO system that can create a purchase order document, in any format.
- Before the implementation of Esker DeliveryWare (and still today, in a few holdout cases) incoming orders were messy. An incoming order could be either a company-provided form that was filled in by hand and then faxed, or it could have been the ordering customer's own PO document — "pretty much the whole gamut from napkins to an actual nice PO," explained one interviewee.
- Sales order reps would file paper documents in file cabinets and then subsequently after billing was completed, staff would have to pack the paper into boxes and ship it to off-site storage for seven years until it could be destroyed.
- Esker DeliveryWare was acquired to manage inbound faxing, and it was deployed in two phases:
 - o Phase 1 eliminated the paper fax process, along with attendant paper and filing activities. A side benefit of this phase was that order documents were now stored

in an electronic format and saved as attachments. Retrieval was much faster and more assured than paper stored in file cabinets.

- o Phase 2 converted faxed orders through optical character recognition (OCR) data extraction into electronic orders that could be passed directly into SAP or any other application, eliminating manual data entry. This process accommodated the customers' PO format or a company-standard format. Later, sales order-related documents were electronically combined and archived.
- Efficiency was achieved in areas such as *late archiving*, which is the practice for handling paper-only order materials, when no fax or electronic order is received. So these paper orders had to be manually scanned, and printed copies needed to be made in order to store them and attach them to the resulting order records.
- Esker DeliveryWare offers a faster way to set up the company's customers with efficient ordering (and save time and money on the company side) compared with EDI or pure XML formats. Esker DeliveryWare offers a less structured, less time-consuming process of setup. "EDI is very stringent and formal," noted one manager. "It can take months. We can set up a new customer to come through Esker DeliveryWare by simply showing them what information we need, letting them tell us how they're going to format it, and here's the phone/email address to start using, and they're up and live."

TEI Framework

Introduction

From the information provided in the interviews with this Esker customer, Forrester has constructed a TEI framework for those organizations considering implementation of Esker DeliveryWare. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

Framework Assumptions

Table 2 lists the discount rate used in the present value (PV) and net present value (NPV) calculations and time horizon used for the financial modeling.

Table 2: General Assumptions

Ref.	General assumptions	Value
	Discount rate	8%
	Length of analysis	Three years

Source: Forrester Research, Inc.

Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult with their finance departments to determine the most appropriate discount rate to use within their own organizations.

Costs

The key cost categories associated with this Esker DeliveryWare implementation are organized into the following categories: 1) software and maintenance; 2) internal labor for implementation; 3) server hardware; 4) training time for affected employees; and 5) recurring internal labor costs to maintain and manage the Esker DeliveryWare capabilities. The following are the cost inputs to the financial analysis.

Software License And Maintenance Fee

The software license for this Esker DeliveryWare implementation was \$291,000, plus annual maintenance of \$60,000.

Professional Services

Fees for consulting services, providing technical and best practices expertise, amounted to \$159,500 for this Esker DeliveryWare implementation.

Implementation Labor Costs

Managers interviewed for this study estimated that the amount of internal staff labor for the six months of initial implementation in 2006 and the development of electronic orders in 2007 and 2008. About two dozen individuals were involved, although only two were dedicated full-time to the project. The estimates provided to Forrester for this cost category are: six FTEs dedicated 75% in the initial period (Year 0), three FTEs in Year 1, and two FTEs in Year 2. These are multiplied by an average fully loaded compensation of \$55,000 to produce a total cost of implementation labor of \$522,500 as show in Table 3.

Table 3: Implementation Labor Costs

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	Total
C1	Number of people (person-years)		6.0	3.0	2.0		
C2	Fully-burdened compensation		\$55,000				
C3	Dedicated %		75%	100%	100%		
Ct	Implementation labor costs	$C1 \times C2 \times C3$	\$247,500	\$165,000	\$110,000		\$522,500

Source: Forrester Research, Inc.

Hardware

This Esker DeliveryWare implementation called for additional server hardware — a five-server cluster for production and two machines for development and test environments. The cost of these seven machines was approximately \$35,000 as shown below.

Table 4: Server Hardware

Ref.	Metric	Calculation	Initial
D1	Hardware costs (avg./unit)		\$5,000
D2	Number of units		7
Dt	Server hardware (7 units)	D1*D2	\$35,000

Source: Forrester Research, Inc.

Training

Training of the sales order staff was conducted by the internal development team (a cost included in the calculations in implementation labor costs above). Staff members were instructed in the use of paperless orders, workflows, and new work processes. Each sales order rep received approximately 3 hours of training. These employees earn an average fully loaded compensation of \$30 per hour. The total for training calculates to \$21,600 as shown below.

Table 5: Training Costs

Ref.	Metric	Calculation	Initial
E1	Number of people		240
E2	Cost per person (hourly)		\$30.00
E3	Hours		3.0
Et	Training costs (internal labor)	E1*E2*E3	\$21,600

Source: Forrester Research, Inc.

System Support

Ongoing technical and business support of this Esker DeliveryWare implementation requires one technical support person, .25 FTE for maintenance and upgrade support for the hardware, and three business personnel working with the Esker DeliveryWare inbound document queue and OCR validation. These three comprise a dedicated Esker DeliveryWare team that makes sure that good orders are automatically entered into the SAP application and orders containing incomplete or erroneous data are processed into SAP Workflow, where they can be easily corrected and completed into SAP. The team assures that orders are correctly routed to one of 12 order entry

groups depending on product line. They also conduct any training on the Esker system. The support costs are shown in Table 6 below.

Table 6: System Support Costs

Ref.	Metric	Calculation	Per period	Year 1	Year 2	Year 3	Total
F1	Number of people		4.25				
F2	Avg. fully loaded compensation		\$65,000				
F3	Dedicated %		100%				
Ft	System support (internal labor)	$F1 \times F2 \times F3$	276,250				
Fto	Total (original)		\$0	\$276,250	\$276,250	\$276,250	\$828,750

Source: Forrester Research, Inc.

Total Costs

Table 7 summarizes the \$2 million in costs expended by the customer over three years for Esker DeliveryWare and related costs.

Table 7: Total Costs

Costs	Initial	Year 1	Year 2	Year 3	Total
Software license fees	291,000				291,000
Software maintenance		60,000	60,000	60,000	180,000
Professional services	159,500				159,500
Implementation labor costs	247,500	165,000	110,000		522,500
Server hardware (7 units)	35,000				35,000
Training costs (internal labor)	21,600				21,600
System support (internal labor)		276,250	276,250	276,250	828,750
Total	\$754,600	\$501,250	\$446,250	\$336,250	\$2,038,350

Source: Forrester Research, Inc.

Benefits

We needed to find a way to improve the order entry because even though we were growing and expanding, we could not continue to grow our operation without changing how we process orders. We had to get more efficient. And we needed the technology to help us do that. Otherwise I'm not sure we would have enough people or enough file cabinets.

-- Strategic planning and projects manager

The key benefit categories associated with this Esker DeliveryWare implementation include: 1) reduced labor costs; 2) paper cost reductions; and 3) elimination of much of the cost of off-site document storage.

Labor Cost Savings – Paper Order Processing

The Esker DeliveryWare implementation for the customer profiled in this study resulted in a reduction in staff numbers, through attrition or reassignments, by as many as 50 people over a two-year period. This is the largest category of benefit, and it represents the amount of labor no longer required to receive, manually enter, collate, copy, move, file, retrieve and store the emailed and faxed paper order forms. Due to other initiatives going on at the time, an exact number cannot be determined, but it is estimated that approximately 50 FTEs were in this category. Forrester conservatively assumes that a maximum of 50 FTEs earning an average fully loaded annual compensation of \$40,000, have been reduced from the original headcount of 240 people by the start of Year 3. See the *Risk* section below to see how Forrester introduces additional conservative factors in quantifying this benefit estimate.

Table 8: Labor Cost Savings

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
G1	Number of workers		35	45	50	
G2	Fully burdened compensation		\$40,000			
Gt	Reduction in headcount	G1*G2	\$1,400,000	\$1,600,000	\$1,800,000	\$5,200,000

Source: Forrester Research, Inc.

Paper Cost Savings

“We used to have the office supply trucks arrive at least once a week, and you would hear that thud when they dropped the cases of paper onto the floor. We don’t get deliveries that frequently anymore,” pointed out a business analyst interviewed for this study. The company eliminated 12 incoming fax machines from the group’s operations. Along with those machines went the paper and the related cost of the paper. Forrester assumes that each machine consumed three cases of paper per week, for 50 weeks each year, multiplied by a delivered cost of \$30 per case. The annual total

is \$54,000 initially, with an assumption of 10% growth, for nearly \$180,000 in savings after three years, as shown in Table 9 below.

Table 9: Paper Cost Savings

Ref.	Metric	Calculation	Year 1	Year 2	Year 3	Total
H1	Number of fax machines		12			
H2	Paper consumption per machine/ week (cases)		3.0	3.3	3.6	
H3	Cost per case (delivered)		\$30.00			
H4	Weeks per year		50			
Ht	Paper cost savings	$H1 \times H2 \times H3 \times H4$	\$54,000	\$59,400	\$65,340	\$178,740

Source: Forrester Research, Inc.

Cost Savings For Off-Site Document Storage

In addition to eliminating scores of filing cabinets in company-owned facilities, the company has greatly reduced the need for off-site archival storage of the paper orders and related attachments. Assuming a cost of \$65 per 100 cases per month and a starting number of cases of 1,200 per year (increasing by 10% annually), then this benefit category sums to nearly \$60,000 over three years.

Table 10: Off-Site Document Storage Cost Savings

Ref.	Metric	Calc	Year 1	Year 2	Year 3	Total
I1	Number of cases (added)	1,200 plus 10% annually plus prior year quantity	1,200	2,520	3,972	7,692
I2	Storage cost per 100 cases/month		\$65.00			
It	Cost savings in off-site document storage (cumulative)	$(I1/100) \times I2 \times 12$ + prior year amount	\$9,360	\$19,656	\$30,982	\$59,998

Source: Forrester Research, Inc.

Better Customer Service

“Esker DeliveryWare significantly improved our customer service,” explained one company executive interviewed for this study. “Now, having electronic copies of all of our correspondence and incoming documents is a far cry from the earlier days when a customer would call with a problem, and we had to go dig those things out of the file. We typically had to call the customer back every time that happened. Whereas in today’s world, that material is instantly accessible from the electronic storage and you can get the answer while the customer is still on the phone. That has

improved this group's first call resolution metric by at least 20% to 25%, probably more. We are now at 65%, with a goal of over 90%. And we have only been measuring for a year. So, beyond labor cost savings [described above], that's probably our biggest improvement." Although this benefit category was not quantified for this study, largely because measurement methodologies were not in place at this company in prior years, Forrester urges users of this analysis to evaluate ranges of expected value of improved customer service.

Total Benefits

Table 11 shows the total benefits that were quantified for this study.

Table 11: Total Benefits

Benefits	Initial	Year 1	Year 2	Year 3	Total
Reduction in headcount		1,400,000	1,800,000	2,000,000	5,200,000
Paper cost savings		54,000	59,400	65,340	178,740
Cost savings in off-site document storage (cumulative)		9,360	19,656	30,982	59,998
Total (original)		\$1,463,360	\$1,879,056	\$2,096,322	\$5,438,738

Source: Forrester Research, Inc.

Risk

Risk is the third component within the TEI model; it is used as a filter to capture the uncertainty surrounding different cost and benefit estimates. If a risk-adjusted ROI still demonstrates a compelling business case, it raises confidence that the investment is likely to succeed because the risks that threaten the project have been taken into consideration and quantified. The risk-adjusted numbers should be taken as "realistic" expectations, since they represent the expected values considering risk. In general, risks affect costs by raising the original estimates, and they affect benefits by reducing the original estimates.

For the purpose of this analysis, Forrester risk-adjusts cost and benefit estimates to better reflect the level of uncertainty that exists for each estimate. The TEI model uses a triangular distribution method to calculate risk-adjusted values. To construct the distribution, it is necessary to first estimate the low, most likely, and high values that could occur within the current environment. The risk-adjusted value is the mean of the distribution of those points.

For example, in the case of the implementation labor costs (initial upfront labor prior to implementation), the Year 1 amount of \$247,500 value used in this analysis can be considered the "most likely" or expected value. This cost category will vary based on any unforeseen complexity or delay in implementation. This variability is a risk that is captured as part of this study; Forrester uses an assumption of seven person-years on the high end, seven person-years as the most likely, and six person-years on the low end. This has the effect of increasing the cost estimate to take into account the fact that original cost estimates are more likely to be revised upward than downward. Forrester then creates a triangular distribution to reflect the range of expected costs, with 6.33 person-years as the mean. Forrester applies this mean to the annual compensation amount of \$55,000 to arrive at a risk-adjusted value of \$288,750.

Some cost figures are not risk-adjusted. License costs, for example, can be determined with a high degree of certainty (and contractually set) before a project is started. License, maintenance, and professional services costs presented in this study are not risk-adjusted for this reason.

On the benefits side, Forrester addresses the uncertainty around the amount of labor that this Esker DeliveryWare implementation has eliminated or re-allocated to other areas of the business. Measuring the actual impact of Esker DeliveryWare on headcount is challenging because there were a number of other initiatives underway at the time within this customer's organization. Forrester therefore uses the risk adjustment methodology to build a conservative bias into the financial framework. The customer is confident that change in the number of staff in this area was 50 FTEs, thus Forrester uses an estimate of 50 as the most likely and sets the maximum amount at 50 also, while the minimum amount assumed is 45 FTEs at the start of Year 3. The mean or risk-adjusted value is thus 48.3. The ramp up to the Year 3 values is shown in the table below.

Table 12: Labor Cost Savings — Risk-Adjustment Factors

Metric	Year 1	Year 2	Year 3
Number of workers - low	30	40	45
Number of workers - expected	35	45	50
Number of workers - high	35	45	50
Number of workers - risk-adjusted	33.3	43.3	48.3

Source: Forrester Research, Inc.

The other costs and benefits of the Esker DeliveryWare implementation considered in this study are risk-adjusted using factors shown in the table below.

Table 13: Risk-Adjustment Factors

	Factor	Metric	Low	Original	High	Mean
Costs	Server hardware	7 machines x \$__	\$5,000	\$5,000	\$6,000	\$5,333
	Training	240x\$30x3 hrs x __%	100%	100%	150%	108.3%
	System support labor	2 FTE x \$65,000 x __%	100%	100%	150%	108.3%
Benefits	Paper cost savings	# cases x \$65 / case x __%	50%	100%	100%	83.3%
	Cost savings – off-site storage	12 fax machines x 3 cases / week x \$30 x 50 wks x __%	80%	100%	103%	94%

Source: Forrester Research, Inc.

All of the risk-adjusted cost and benefit amounts are shown in Tables 14 and 15 below.

Flexibility

“What we’re trying to do is to capture that group of customers that are the best candidates for Esker DeliveryWare use. And then we’re trying to expand with Esker DeliveryWare to support the various ways beyond the paper fax that this group of customers finds the easiest and the best way to send us their orders. So that’s how Esker DeliveryWare fits the niche between Web based ordering and a full-blown EDI.”

-- Strategic planning and projects manager

Flexibility, as defined in Forrester’s TEI methodology, is an investment in additional capacity or capability today that can be turned into future business benefits at some additional cost in the future. This provides an organization with the “right” or the ability to engage in specific future initiatives — but not the obligation to do so. In multiple scenarios, and in this case for the customer in this study, a customer might choose to implement Esker DeliveryWare within a certain scope of activities and business areas and later discover additional value that can be realized by expanding usage and capturing additional value. The flexibility component of TEI can capture that value, using the industry standard Black-Scholes option pricing model.

While data for calculating the monetary value of several flexibility options was not available at the time of publication, the customer identified the following areas in the global organization where additional value has been developed since the initial deployment of Esker DeliveryWare in the sales order operations of the contract division — a series of real options, including these examples:

- Esker DeliveryWare is now used by the European division for some inbound accounts payable applications.
- The consumer rep group uses the software for dealing with the post-sale consumer communications in order to eliminate paper, turning those items into electronically storable pieces instead of paper.
- Esker DeliveryWare outbound fax management is used globally throughout the customer organization.

Further, the contract division is developing the capabilities to use Esker DeliveryWare to get phone orders converted to electronic documents, as well as expanding automated order entry, scheduling service calls, and automating PO matching with other customer data in the SAP application.

TEI Framework: Summary

Considering the financial framework constructed above, the results of the costs, benefits, risk, and flexibility sections using the representative numbers can be used to determine a return on investment, net present value, and payback period. Tables 1 and 16 show the consolidated numbers for this customer’s implementation.

Tables 14 and 15 below show the risk-adjusted values, applying the risk-adjustment method indicated in the Risks section and the values from Tables 12 and 13.

It is important to note that values used throughout the TEI Framework are based on in-depth interviews with one organization. Forrester makes no assumptions as to the potential return that

other organizations will receive within their own environment. Forrester strongly advises that readers use their own estimates within the framework provided in this study to determine the expected financial impact of implementing Esker DeliveryWare.

Table 14: Total Risk-Adjusted Cost And Present Value

Costs	Initial	Year 1	Year 2	Year 3	Total	Present value
Software license fees	291,000				291,000	291,000
Software license fees (yearly)		60,000	60,000	60,000	180,000	154,626
Professional fees	159,500				159,500	159,500
Implementation labor costs	261,250	169,583	114,583		545,417	516,508
Server hardware (7 units)	37,333				37,333	37,333
Training costs (internal labor)	23,328				23,328	23,328
System support (internal labor)		298,350	298,350	298,350	895,050	768,877
Total	\$772,411	\$527,933	\$472,933	\$358,350	\$2,131,628	\$1,951,172

Source: Forrester Research, Inc.

Table 15: Total Risk-Adjusted Benefit And Present Value

Benefits	Initial	Year 1	Year 2	Year 3	Total	Present value
Reduction in FTEs		1,333,333	1,733,333	1,933,333	5,000,000	4,255,364
Cost savings in off-site document storage (cumulative)		7,769	16,314	25,715	49,798	41,594
Paper cost savings		50,760	55,836	61,420	168,016	143,627
Total		\$1,391,862	\$1,805,484	\$2,020,468	\$5,217,814	\$4,440,585

Source: Forrester Research, Inc.

Study Conclusions

Forrester's interviews with Esker's customer yielded several valuable observations. Based on information collected in interviews, Forrester found that organizations can realize benefits in the form of:

- Labor cost savings for operations staff who maintain all types of sales order documentation and manually entered data and maintained physical file storage before the automation made possible by Esker DeliveryWare.
- Greatly reduced paper consumption and corresponding cost savings.
- Eliminating the cost of off-site storage of physical records and documents.

The financial analysis provided in this study illustrates the process for an organization to evaluate the value proposition of Esker DeliveryWare in its environment. Based on information collected in interviews with this customer, Forrester calculated a three-year risk-adjusted ROI of 128% for this customer organization with a payback period (breakeven point) of approximately eleven months.

Based on these findings, companies looking to implement Esker DeliveryWare capabilities can see multiple categories of benefit. Using the TEI framework, many companies may find the potential for a compelling business case to make such an investment.

Table 16: Risk-Adjusted ROI

Total benefits	Initial	Year 1	Year 2	Year 3	Total	PV/NPV
Total costs	(\$772,411)	(\$527,933)	(\$472,933)	(\$358,350)	(\$2,131,628)	(\$1,951,172)
Total benefits		\$1,391,862	\$1,805,484	\$2,020,468	\$5,217,814	\$4,440,585
Total	(\$772,411)	\$863,929	\$1,332,550	\$1,662,118	\$3,086,186	\$2,489,413
Return on investment	128%					
Payback period	10.7 months					

Source: Forrester Research, Inc.

Appendix A: Total Economic Impact™ Overview

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.

The TEI methodology consists of four components to evaluate investment value: benefits, costs, risks, and flexibility. For the purpose of this analysis, the impact of flexibility was not quantified.

Benefits

Benefits represent the value delivered to the user organization — IT and/or business units — by the proposed product or project. Often product or project justification exercises focus just on IT cost and cost reduction, leaving little room to analyze the effect of the technology on the entire organization. The TEI methodology and the resulting financial model place 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. Calculation of benefit estimates involves a clear dialogue with the user organization to understand the specific value that is created. In addition, Forrester also requires that there be a clear line of accountability established between the measurement and justification of benefit estimates after the project has been completed. This ensures that benefit estimates tie back directly to the bottom line.

Costs

Costs represent the investment necessary to capture the value, or benefits, of the proposed project. IT or the business units may incur costs in the forms of fully burdened labor, subcontractors, or materials. Costs consider all the investments and expenses necessary to deliver the proposed value. In addition, the cost category within TEI captures any incremental costs over the existing environment for ongoing costs associated with the solution. All costs must be tied to the benefits that are created.

Risk

Risk measures the uncertainty of benefit and cost estimates contained within the investment. Uncertainty is measured in two ways: the likelihood that the cost and benefit estimates will meet the original projections and the likelihood that the estimates will be measured and tracked over time. TEI applies a probability density function known as “triangular distribution” to the values entered. At a minimum, three values are calculated to estimate the underlying range around each cost and benefit.

Flexibility

Within the TEI methodology, direct benefits represent one part of the investment value. While direct benefits can typically be the primary way to justify a project, Forrester believes that organizations should be able to measure the strategic value of an investment. Flexibility represents the value that can be obtained for some future additional investment building on top of the initial investment already made. For instance, an investment in an enterprisewide upgrade of an office productivity suite can potentially increase standardization (to increase efficiency) and reduce licensing costs. However, an embedded collaboration feature may translate to greater worker productivity if activated. The collaboration can only be used with additional investment in training at some future point in time. However, having the ability to capture that benefit has a present value that can be estimated. The flexibility component of TEI captures that value.

Appendix B: Glossary

Discount rate: The interest rate used in cash flow analysis to take into account the time value of money. Although the Federal Reserve Bank sets a discount rate, companies often set a discount rate based on their business and investment environment. Forrester assumes a yearly discount rate of 10% for this analysis. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult their organization to determine the most appropriate discount rate to use in their own environment.

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.

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

Payback period: The breakeven point for an investment. The point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Return on investment (ROI): A measure of a project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits minus costs) by costs.

A Note On Cash Flow Tables

The following is a note on the cash flow tables used in this study (see the Example Table below). The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1. Those costs are not discounted. All other cash flows in Years 1 through 3 are discounted using the discount rate shown in Table 2 at the end of the year. Present value (PV) calculations are calculated for each total cost and benefit estimate. Net present value (NPV) calculations are not calculated until the summary tables and are the sum of the initial investment and the discounted cash flows in each year.

Example Table

Ref.	Category	Calculation	Initial cost	Year 1	Year 2	Year 3	Total

Appendix C: About The Project Director

Jeffrey North, Principal Consultant

Jeffrey North is a principal consultant with Forrester's Total Economic Impact (TEI) consulting practice. The TEI methodology focuses on measuring and communicating the value of IT and business decisions and solutions as well as providing a business case based on the costs, benefits, flexibility, and risk of investments.

Jeff came to Forrester with consulting and operating experience, notably working with fast-growth companies. He was a founding member of the digital strategy practice at Cambridge Technology Partners, where he specialized in business value justification of technology investments and customer advocacy. As a director in the international and catalog business units at Staples, Jeff built and managed metrics and reporting programs in North America and Europe as the company experienced significant growth. He has also consulted in a business-IT capacity to retailers and life sciences companies.

Jeff holds a B.A. from St. Lawrence University and an M.B.A. with concentrations in international management and finance from the Thunderbird School of Global Management.