

A Forrester Total Economic Impact™
Study Commissioned By Thinkwise
Software
April 2018

The Total Economic Impact™ Of Thinkwise Software

Cost Savings And Business Benefits
Enabled By Thinkwise Software Factory

Table Of Contents

Executive Summary	1
Key Findings	1
TEI Framework And Methodology	4
The Thinkwise Customer Journey	5
Interviewed Organization	5
Key Challenges	5
Solution Requirements	6
Key Results	6
Analysis Of Benefits	7
Administrative Efficiency Savings	7
Finance Efficiency Savings	8
Avoided Customization and Licensing	9
Unquantified Benefits	10
Flexibility	10
Analysis Of Costs	11
Cost To Develop And Maintain Thinkwise Solution	11
Internal Resource Cost For Implementation	12
Financial Summary	13
Thinkwise: Overview	14
Appendix A: Total Economic Impact	15

Project Directors:

Sam Conway
Dean Davison

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.

© 2018, Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. For additional information, go to forrester.com.

Executive Summary

Benefits And Costs



Administrative efficiency savings:
\$333,007



Finance efficiency savings:
\$307,126



Avoided customization and licensing:
\$187,854

Thinkwise provides a low-code development platform that helps its customers create and maintain custom enterprise resource planning (ERP) solutions. Thinkwise commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying a custom Thinkwise solution. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the Thinkwise ERP on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed one customer with multiple years of experience using a custom Thinkwise ERP solution. The organization used the ERP to manage the financial planning, accounting, and maintenance functions of their short sea shipping business.

Prior to using Thinkwise, the interviewed customer used an older custom ERP solution. However, the vendor supporting this solution provided limited updates and ongoing support before entirely discontinuing service — leaving the customer with an outdated ERP solution which could not be modernized to meet their evolving business needs. The organization explored large out-of-the-box solutions from major vendors, but ultimately decided that implementing them would require either excessive customization or a fundamental change in how they operated. Ironically, adopting a package would require significant investments both in software development and staff training.

The Thinkwise customer solution allows the organization to manage its finance and accounting functions more effectively and efficiently, reducing manual inputs and invoice errors. The organization was able to scale its business without hiring additional staff. Furthermore, Thinkwise's low-code Software Factory allows the organization to quickly develop new applications to further improve operations.

Key Findings

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

- › **Administrative efficiency savings of \$333,007.** With their prior ERP solution, the interviewed organization required administrative clerks to manually upload and enrich shipping manifests to calculate agent commissions and stevedoring fees. With Thinkwise, the organization integrated their ERP directly with the agent manifest system, automating the process of uploading, enriching, and calculating fees. Furthermore, the organization grew and added new services in new ports, without additional administrative staff. This efficiency gain reduced the need for four full-time clerks over a three-year period, representing a three-year PV of \$333,007.
- › **Finance efficiency savings of \$307,126.** Automating the invoice and manifest reconciliation efforts greatly improved the efficiency of the interviewed organization's finance department. When the organization started a new terminal service, it did not need to bring on additional finance employees to handle the increased volume of work. This improvement in efficiency saved the organization \$307,126 over a three-year period.



ROI
80%



Benefits PV
\$827,987



NPV
\$369,184



Payback
15.0 months

- › **Avoided customization and licensing fees of \$187,854.** The organization's primary alternative to engaging Thinkwise and developing a custom ERP solution was to purchase an ERP package from a major vendor and either invest in significant customization or fundamentally change the way their business operated to meet the rigid framework of the package. Developing a custom solution to fit their ongoing business operations saved the organization \$187,854 in license and custom-development expenditures over a three-year period.

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

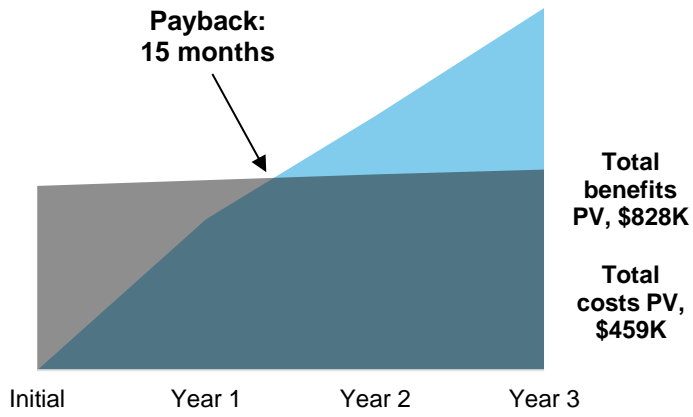
- › **Quickly develop new modules and upgrades.** With Thinkwise Software Factory, the interviewed organization was able to explore and develop new business modules and tools. The interviewed organization most recently implemented a new tool for tracking maintenance and repairs for shipping containers.
- › **Receive payments faster.** With their new ERP solution, the organization was able to follow up directly with agents receiving shipments. Instead of manually checking documentation, the organization could quickly reconcile discrepancies between shipments and manifests, facilitating faster payments for goods delivered.
- › **Avoid costly errors.** With process automation, the organization was able to avoid potentially costly errors committed during the manual uploads, manifest enrichments, and cost calculations.
- › **Reduced training costs.** Because Thinkwise modeled the new ERP on the organization's existing system and processes, employees required minimal training which was completed on the job.

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

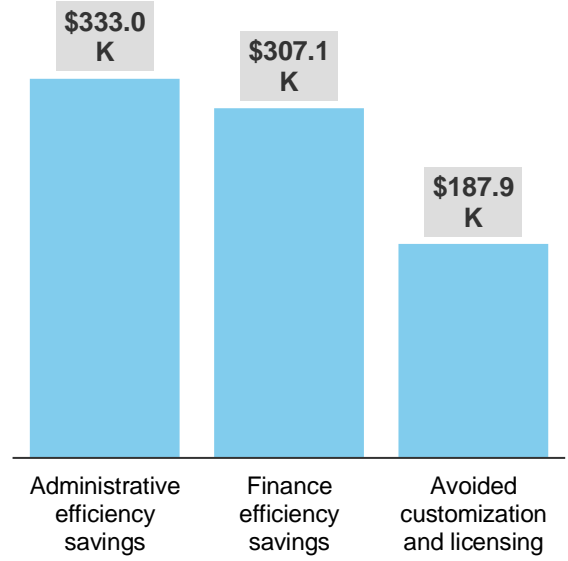
- › **Cost to develop and maintain custom Thinkwise ERP solution.** The organization paid Thinkwise a fee for the development and delivery of the ERP solution. Furthermore, the organization paid an annual innovation fee, which covers support and continued upgrades to their custom solution. These fees to Thinkwise totaled \$410,503 over a three-year period.
- › **Internal implementation costs of \$48,300.** The organization's corporate controller dedicated 40% of their time to overseeing the development and implementation of the custom ERP solution, resulting in a total cost of \$48,300.

Forrester's interview with an existing customer and subsequent financial analysis found that the interviewed organization experienced benefits of \$827,987 over three years versus costs of \$458,803, adding up to a net present value (NPV) of \$369,184 and an ROI of 80%.

Financial Summary



Benefits (Three-Year)



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 Thinkwise.

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 Thinkwise can have on an organization:



DUE DILIGENCE

Interviewed Thinkwise stakeholders and Forrester analysts to gather data relative to Thinkwise Software Factory.



CUSTOMER INTERVIEW

Interviewed one organization using Thinkwise 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 Thinkwise'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 Thinkwise 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 Thinkwise.

Thinkwise 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.

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

The Thinkwise Customer Journey

BEFORE AND AFTER THE THINKWISE INVESTMENT

Interviewed Organization

For this study, Forrester interviewed a Thinkwise customer:

- › Short sea shipping company headquartered in Europe, operating in Western Europe and Africa.
- › Owns and operates a fleet of 50 ships and charters additional vessels for feederling.
- › Employs over 200 employees worldwide.
- › Uses a custom ERP developed by Thinkwise for managing all major accounting and finance functions as well as tracking maintenance and repairs of capital assets.

Key Challenges

The organization faced key productivity, functionality, cost, and integration issues with their previous custom ERP solution.

- › **Inefficient processes for importing manifests and calculating costs.** With their prior solution, the customer required agents receiving goods to manually upload manifests. Furthermore, any fees incurred while chartering vessels on other lines required manual input. The organization required its administrative staff to reconcile inputs from various sources, enriching records and calculating fees manually. The abundance of disparate data sources and manual touchpoints led to errors and delayed payments.
- › **Inability to scale business without significantly higher costs.** The interviewed organization was growing and adding services at new ports. However, every new service burdened the organization with substantial administrative work due to the inefficiency of its legacy ERP system, requiring the organization to hire more full-time administrative and financial employees.
- › **Needed to quickly develop a new system to automate existing processes.** The developer of the organization's legacy ERP solution ended support, forcing it to obtain a replacement. The organization needed the new system to be developed quickly, as prolonged development would leave them reliant on an unsupported system and any outage or downtime would have severe impacts on their ability to continue operations. Furthermore, the organization wanted a new system to automate how they did business, rather than purchase an out-of-the-box solution and tailor their operations to that software.

“Basically, we were stuck with what we had and it was one of the problems. We couldn't upgrade to something new. We couldn't go with the latest technology because that company wasn't there anymore, and they couldn't support us.”

Corporate controller, maritime shipping



“The biggest advantage of Thinkwise was that they could demo what they were capable of to us fairly quickly. They could take that legacy system and then convert it into their software. They could do that quite easily and quickly, so we were quite impressed by that.”

Corporate controller, maritime shipping



Solution Requirements

The interviewed organization searched for a solution that could:

- › Rapidly launch with minimal business slowdown or time investment from core users.
- › Modernize existing system, while retaining existing processes and knowledge.
- › Quickly scale as the business grows.
- › Evolve without requiring additional investments or overhaul of core applications.
- › Improve user efficiency and reduce the need for additional FTE resources as the business grows.

Key Results

The interview revealed that key results from the investment in Thinkwise include:

- › **Quick delivery of new ERP system.** Working with Thinkwise, the organization was able to quickly develop and implement a new custom ERP system. The new ERP solution was developed and rolled out in under one year — and 20% under budget. With a tailor-made ERP solution from Thinkwise, the organization avoided the long and expensive process of implementing and customizing an out-of-the-box solution from package vendors.
- › **Improved invoicing process and time-to-revenue.** With the Thinkwise ERP system, the organization was able to streamline and automate processes which had previously required extensive manual labor to complete. Instead of having administrative and financial staff manually upload manifests and calculate fees, the organization automated those invoicing tasks. The reduction in manual data entry resulted in fewer errors and improved staff's ability to find and rectify issues as they arose — resulting in more accurate calculations of costs and timelier collections and payments of fees.
- › **New service lines added without needing more full-time staff.** With a more efficient manifest system, the organization was able to add a new service line without having to increase the administrative and financial staff supporting it.
- › **Avoided expensive and time-consuming retraining.** Since Thinkwise was modeled on the existing system and business processes, the organization was able to keep their core-processes as is and avoid retraining employees.

“It’s easier now for us to check if there’s a question from somebody. If we’re trying to close off a voyage, we have to see if everything has been collected and if everything has been paid. That process now is much easier. We used to have Excel files and all kinds of other administration around to close off a voyage. But now that can all be directly done in Thinkwise.”

Corporate controller, maritime shipping



“Thinkwise used our legacy system as a basis. They took the database, and from that we built up the new program. A lot of tables and a lot screens look similar to what we previously used, so the users recognize this and it makes it easier for them to work and readjust to the new system.”

Corporate controller, maritime shipping



Analysis Of Benefits

QUANTIFIED BENEFIT DATA

Total Benefits

REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Administrative efficiency savings	\$91,200	\$136,800	\$182,400	\$410,400	\$333,007
Btr	Finance efficiency savings	\$123,500	\$123,500	\$123,500	\$370,500	\$307,126
Ctr	Avoided customization and licensing	\$165,585	\$23,655	\$23,655	\$212,895	\$187,854
Total benefits (risk-adjusted)		\$380,285	\$283,955	\$329,555	\$993,795	\$827,987

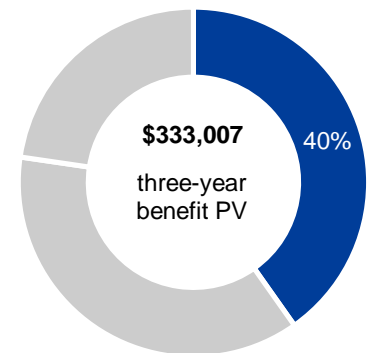
Administrative Efficiency Savings

The interviewed organization offered container shipping services to ports across Western Europe and Africa. In each port, the organization had agents who would compile bills of lading into manifests and send them to administrative clerks who would manually upload them into the ERP system. These administrative clerks would then enrich these files with other relevant information and use them to calculate fees and payments to agents and stevedores at receiving ports. With the custom Thinkwise ERP, the organization was able to automate this process, ensuring that their system was integrated to those used by agents. Now manifests were directly imported into the system and fees were automatically calculated without the need for administrative staff to manually upload files or calculate fees in external workbooks.

- › The new system can automatically check information in agent invoices against their manifest database, reducing the manual effort dedicated to invoice control.
- › As the organization expanded their services, they were able to avoid hiring two full-time administrative clerks with automated invoice control and manifest entry.

For the interviewed organization, Forrester assumes the average fully burdened administrative clerk compensation is \$48,000. Readers are likely to experience a wide range of results based on their current tools and scope of business. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of \$333,007.

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 more than \$827,000.



Administrative efficiency savings: **40%** of total benefits

Administrative Efficiency Savings: Calculation Table

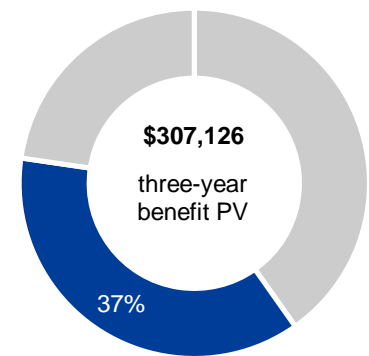
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
A1	Avoided FTE administrative clerk through improved efficiency		2	3	4
A2	Average fully burdened administrative clerk comp		\$48,000	\$48,000	\$48,000
At	Administrative efficiency savings	A1*A2	\$96,000	\$144,000	\$192,000
	Risk adjustment	↓5%			
Atr	Administrative efficiency savings (risk-adjusted)		\$91,200	\$136,800	\$182,400

Finance Efficiency Savings

The interviewed organization traditionally spent a significant amount of time closing voyages — ensuring that all collections and payments are accounted for. Thinkwise’s custom ERP integrated seamlessly with the existing financial applications, greatly improving the process of checking and correcting invoices.

- › The interviewed organization started new services and did not need to bring on additional financial staff due to improved efficiency on their team.
- › The financial controller said: “It’s now more efficient. The way of working is more efficient, and it makes it easier to close those voyages. But it’s difficult to say because in the meantime we have started up new services, etc. So, we’re doing more with the same amount of people, basically.”
- › The organization avoided hiring two FTEs in their finance department as they expanded their services due to increased efficiency.

For the interviewed organization, Forrester assumes the average fully burdened finance FTE compensation is \$65,000. Readers are likely to experience a wide range of results based on their current tools, ability of FTE resources, and scope of business. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of \$307,126.



Financial efficiency savings: **37%** of total benefits

Finance Efficiency Savings: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	Avoided FTE in finance through efficiency		2	2	2
B2	Average fully burdened finance comp		\$65,000	\$65,000	\$65,000
Bt	Finance efficiency savings	B1*B2	\$130,000	\$130,000	\$130,000
	Risk adjustment	↓5%			
Btr	Finance efficiency savings (risk-adjusted)		\$123,500	\$123,500	\$123,500

Avoided Customization And Licensing

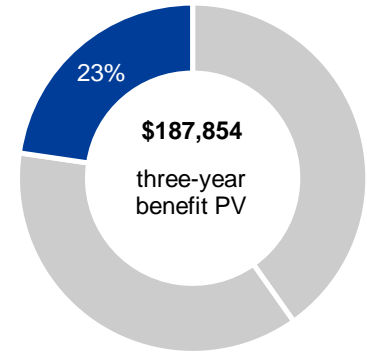
The organization searched for an out-of-the-box ERP solution which could meet the demands of their business operations and integrate with their existing applications, but it found that these solutions were expensive and would require extensive customization to produce the desired functionality. In choosing Thinkwise, the organization was able to avoid these costs by developing a new ERP based on their legacy systems and business processes. The organization ensured that the ERP was modern but retained core features from their discontinued legacy system. Furthermore, they did not need to change the way their business operated as a reaction to the new system, nor did they have to invest in substantial training for their workforce.

- › The financial controller said: “We have looked at software packages from major vendors. And mostly, we found that they were too big and had too many differences to what we were used to. That would have taken a lot of time to implement, and also to adjust to our needs; and then the training would have cost us more time too. In that respect, Thinkwise has definitely saved us a lot of time and money.”
- › The organization avoided paying an annual license fee for usage of an out-of-the-box solution, having complete ownership of their custom Thinkwise system.

In modeling this benefit, Forrester assumes:

- › Annual license fee per user of \$249.
- › 100 user licenses.
- › Implementation and training costs of 6x total annual license fees.

Readers are likely to experience a wide range of results based on their size, existing ERP system, business processes, and desired functionality. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of \$187,854.



Avoided customization and licensing: 23% 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.

Avoided Customization And Licensing: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
C1	Users		100	100	100
C2	Annual license fee per user		\$249	\$249	\$249
C3	Annual subscription fee	C1*C2	\$24,900	\$24,900	\$24,900
C4	Implementation and training costs	C3*6	\$149,400		
Ct	Avoided customization and licensing	C3+C4	\$174,300	\$24,900	\$24,900
	Risk adjustment	↓5%			
Ctr	Avoided customization and licensing (risk-adjusted)		\$165,585	\$23,655	\$23,655

Unquantified Benefits

The organization reported additional benefits of Thinkwise that they were unable to specifically measure or quantify:

- › **Accelerated collections and payments.** The organization stated that they were able to close voyages and collect payments quicker due to their improved invoice controls. The corporate controller said: “Now we can directly follow up and tell the agents, ‘We are missing something.’ Before, we would follow up maybe after six months and then in the end the agent would pay us. So, we wouldn’t miss out on any revenues, but now the process is more timely.”
- › **Development of new business applications and cost control measures.** The organization has begun adding new features and functionalities integrated into the Thinkwise system. Recently, the organization has developed a system for tracking the maintenance and repair of their shipping containers.
- › **Avoidance of costly errors.** Automated processes and reduced manual touchpoints eliminated the possibility of committing potentially costly and embarrassing errors.

“Thinkwise enables us to develop new software easier and faster. It would cost us more, or maybe we would have to look for existing software in the market. With Thinkwise we can develop on top of what we already have, and we can directly integrate with the existing system. That’s quite an advantage because if we buy software in the market, you must integrate that again with your existing systems”

Corporate controller, maritime



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 and later realize additional uses and business opportunities, including:

- › **Future-proof integration.** Thinkwise allows the organization to deploy their system onto new technology as it emerges with perpetual innovation support. The organization plans to deploy their system on mobile devices, which was not possible with their legacy system.
- › **Rapidly evolve system with changing business demands.** Thinkwise’s low-code platform provides the ability to incorporate or alter functionality at high speed. Organizations can quickly adapt to changing business demands.

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

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	Cost to develop and maintain custom Thinkwise ERP solution	\$373,200	\$15,000	\$15,000	\$15,000	\$418,200	\$410,503
Etr	Internal resource cost for implementation	\$48,300	\$0	\$0	\$0	\$48,300	\$48,300
	Total costs (risk-adjusted)	\$421,500	\$15,000	\$15,000	\$15,000	\$466,500	\$458,803

Cost To Develop And Maintain Thinkwise Solution

The interviewed organization paid Thinkwise to develop a new custom ERP system and integrate it with their existing business application ecosystem. The full development took one year and arrived 20% under budget.

Additionally, the organization paid an annual innovation fee, which covers support and future upgrades. The financial controller stated: "With Thinkwise we're paying an annual innovation fee. With that, they give us almost monthly upgrades because they are developing their system based on the new technology. Whatever new comes in, they will upgrade their system and they will give updates to us."

Organizations developing and implementing a custom ERP system may have varying experiences based on the size, scope, and complexity of business operations and related applications. The interviewed organization came in significantly under budget, which may not be indicative of all experiences. To account for these risks, Forrester adjusted this cost upward by 20%, yielding a three-year risk-adjusted total PV of \$410,503.

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 more than \$458,000.

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.

Cost To Develop And Maintain Custom Thinkwise ERP: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
D1	Cost to develop and implement custom ERP		\$311,000			
D2	Annual innovation fee		\$0	\$12,500	\$12,500	\$12,500
Dt	Cost to develop and maintain Thinkwise solution	D1+D2	\$311,000	\$12,500	\$12,500	\$12,500
	Risk adjustment	↑20%				
Dtr	Cost to develop and maintain custom Thinkwise ERP (risk-adjusted)		\$373,200	\$15,000	\$15,000	\$15,000

Internal Resource Cost For Implementation

The corporate controller of the interviewed organization dedicated 40% of their time during the first year of implementation to oversight and support. Because Thinkwise is tailor-made around existing business processes, the organization did not need to dedicate extensive time to staff training. Users were able to train on the job while going about their normal functions, and the new ERP had almost no learning curve.

- › In modeling the internal resource cost for implementation, Forrester assumes the fully burdened corporate controller compensation is \$115,000.

Readers may experience varying internal resource costs based on size, complexity of system, and staff skills. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of \$48,300.



One year
total implementation and
deployment time

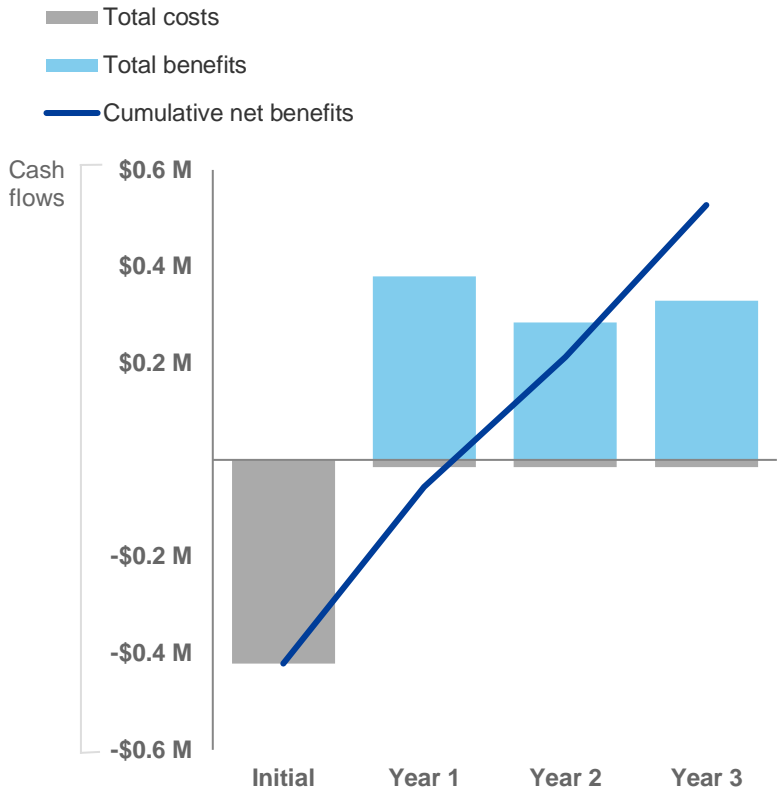
Internal Resource Cost For Implementation: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
E1	Time dedicated to implementation		40%			
E2	Fully burdened corporate controller compensation		\$115,000			
Et	Internal resource cost for implementation	$E1 * E2$	\$46,000	\$0	\$0	\$0
	Risk adjustment	↑5%				
Etr	Internal resource cost for implementation (risk-adjusted)		\$48,300	\$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, 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	(\$421,500)	(\$15,000)	(\$15,000)	(\$15,000)	(\$466,500)	(\$458,803)
Total benefits	\$0	\$380,285	\$283,955	\$329,555	\$993,795	\$827,987
Net benefits	(\$421,500)	\$365,285	\$268,955	\$314,555	\$527,295	\$369,184
ROI						80%
Payback period						15.0 months

Thinkwise Software: Overview

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



Thinkwise Software offers a low-code platform specifically designed for core enterprise systems. The market is constantly changing and so is your business. We believe that your software should be able to adapt on the fly.

Our model-driven approach to software development offers many advantages over traditional business software. We strive to empower organizations through flexible, reliable, and future-proof enterprise business software.

Accelerate Your Digital Transformation

Retain existing data, processes, and knowledge while accelerating your digital transformation. The Thinkwise Upcycler enables organizations to extract a blueprint from existing core legacy systems.

Through the blueprint and our low-code platform we create a new system, integrating new and past business processes. Consolidate past experiences into reliable and easy to use business software. Our low-code platform enables your organization to take full advantage of any new technological breakthroughs like big data and the Internet of Things (IoT).

Future-proof

With Thinkwise, technological debt, outdated systems, and legacy issues are things of the past. Thinkwise enables organizations to deploy their business software onto new technology and provides perpetual support for innovation.

Flexible and easy

Thinkwise is more than just another business software provider. We offer a unique platform that accelerates the way you do business. Business software developed with Thinkwise adapts as your organization changes, rapidly convert each new business process or proposition into robust, reliable software.

For more information about Thinkwise visit www.thinkwisesoftware.com or follow us on twitter @thinkwise.

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.