A Forrester Total Economic Impact™
Study Commissioned By Epicor
August 2017

The Total Economic Impact™ Of Epicor ERP

Driving Efficiency, Customer Responsiveness, And Cost Savings Through Epicor ERP

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August 2017

ABOUT FORRESTER CONSULTING

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Benefits And Costs

Inventory savings with increased visibility across the enterprise
$4.4 million

Incremental profit and increased sales from improved customer experience
$2.7 million

Software licensing and maintenance fees
$1.4 million

Executive Summary

Epicor offers end-to-end, industry-specific enterprise resource planning (ERP) software solutions designed to meet the needs of manufacturing, distribution, retail, and services industries. Epicor ERP provides integrated solutions for customer relationship management (CRM), manufacturing operations, supply chain management (SCM), sales management (SM), financial management, and human capital management (HCM), among others. Epicor commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Epicor ERP. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the Epicor ERP solution on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed several manufacturing firms with years of experience using Epicor ERP. These organizations were looking for a modern ERP solution that would increase visibility throughout the enterprise, improve efficiency, and support growth. As one customer noted: “You need to realize that you are operating in a global landscape. We needed a system with lots of versatility, as we had an aggressive plan for growth.” With Epicor ERP, these customers reduced costs and gained productivity through streamlined and automated processes. Better decision making and faster responsiveness with Epicor ERP brought production and inventory cost savings, as well as improved customer management and increased sales. Epicor ERP also offered these firms deployment flexibility, with the interviewed customers choosing on-premises installations to hosted software-as-a-service (SaaS) implementations.

Prior to using Epicor ERP, the customers typically used legacy ERP solutions supplemented by extensive manual processes. For some customers, processes ranging from relationship management to order processing, production scheduling, and financial review were managed by siloed software suites or homegrown solutions. Several firms had different ERP systems for different subsidiaries and facilities before centralizing on Epicor ERP. Visibility across the enterprise and efficiency were key issues. These manufacturers needed to improve these areas to control costs.

Key Findings

Quantified benefits. The following risk-adjusted quantified benefits are representative of those experienced by the companies interviewed:

- **Increased visibility resulting in inventory savings of $4.4 million.** The composite organization, based on the companies interviewed, used Epicor ERP to forecast demand and plan appropriately, enabling it to increase the number of inventory turns and improve material efficiency and inventory accuracy by 10%.
- **Improved supply chain management efficiency to save $65,718.** The composite’s buyers experienced a 5% productivity improvement, and the organization reduced inventory counting efforts by 67%.

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ROI
264%

Benefits PV
$12.9 million

NPV
$9.3 million

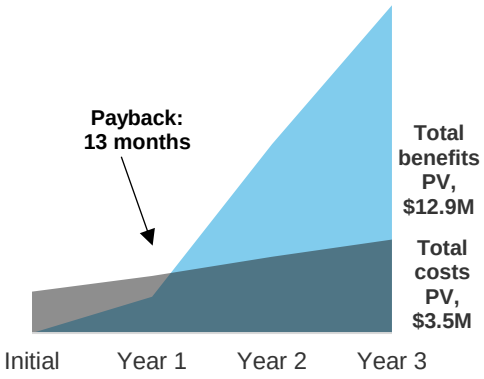
Payback
13 months

- **Improved planning and scheduling processes, saving $1 million.** Better planning and scheduling processes through Epicor ERP resulted in a reduction in production issues, a 10% improvement in planning and scheduling staff productivity, and significant savings on expedited shipping costs.
- **Improved collaboration and production efficiency savings of $1.7 million.** Epicor ERP improved production processes, leading to a reduction in production errors and corresponding cost of rework. In addition, overtime during high season was reduced by 8 hours per week per full-time equivalent (FTE) through level loading. Automation also saved the composite organization $30,000 per year in manual work.
- **Front-office labor savings worth $411,542.** Automation and improved efficiency through Epicor ERP freed front-office resources to redirect effort to production and other work to support company growth.
- **Improved customer experience, leading to a 6% increase in annual revenue, with an incremental profit of $2.7 million.** Organizations reported an increase in sales after they improved customer collaboration, increased visibility, and improved processes with their Epicor ERP deployment.
- **Improved analytics, saving $72,401.** The composite organization gained better analytics and BI capabilities through Epicor ERP. By leveraging Epicor dashboard capabilities, the composite organization saved 0.5 FTEs on their analytics team.
- **Improved financial management processes, saving $156,386.** A more integrated financial system and automated processes through Epicor ERP saved the composite organization's 15 accountants 4 hours in productivity every month.
- **Improved governance, risk, and compliance worth $54,872.** Epicor ERP simplified the process of coordinating trade and shipping compliance with different agencies worldwide, replacing a manual process of documents and codes. This resulted in labor savings equivalent to one FTE and reduced the risk of potential government issues by standardizing a compliance approach.
- **IT cost savings with consolidation and replacement of legacy solutions equal to $2.3 million.** The composite organization consolidated ERP systems for its facilities and subsidiaries under Epicor ERP. It eliminated legacy software suites and associated licenses, fees, hardware, and databases. Consolidated systems also led to a reduction in FTE resources needed to manage software platforms and oversee data backup and recovery.

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

- Faster access to data and improved real-time visibility that enables better decision making.
- Improved multicompany operational efficiency with multibook capabilities.
- Increased competitiveness with faster turnaround of customer quotes and improved pricing accuracy enabled by cost transparency.
- Increased versatility with the Epicor ERP cloud offering.
- Access to deep expertise in manufacturing best practices.

Financial Summary

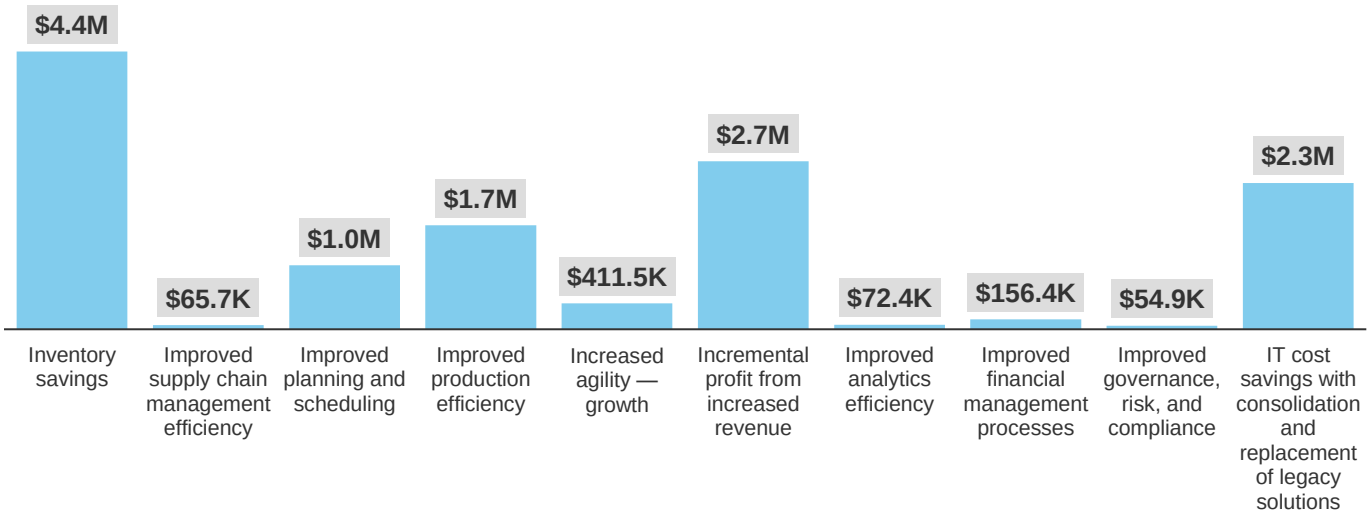


Costs. The interviewed organizations experienced the following risk-adjusted costs:

- **Epicor fees of $1.38 million over three years for the initial license and annual maintenance.** The composite organization deployed Epicor ERP in a hosted installation with initial license fees and annual maintenance costs of approximately 20% of the initial license purchase value. Organizations that choose to deploy Epicor ERP through a SaaS or cloud application would incur monthly subscription costs.
- **Infrastructure costs of $626,687.** The composite organization paid fees of $20,000 per month to a hosting services company for Epicor ERP.
- **Professional services fees of $294,144.** The composite organization enlisted a third-party consulting company for implementation services for Epicor ERP. This consulting firm was retained to support ongoing maintenance and updates to accommodate shifting business needs.
- **Implementation cost of $378,350.** The composite dedicated two IT resources to its Epicor ERP implementation over a six-month period. Ten cross-department leads also spent 60% of their time on the implementation.
- **Administrative costs of $853,861 to manage the software.** The composite organization has two dedicated personnel on administration of Epicor ERP. In addition, three developers spend 60% of their time on Epicor ERP maintenance tasks, such as running scripts, indexing, and patch deployment.

Forrester's interviews with four existing customers and subsequent financial analysis found that an organization based on these interviewed organizations experienced benefits of $12.86 million over three years versus costs of $3.53 million, adding up to a net present value (NPV) of $9.32 million and an ROI of 264%.

Benefits (Three-Year)



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TEI Framework And Methodology

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

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 Epicor ERP can have on an organization:

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

DUE DILIGENCE
Interviewed Epicor stakeholders and Forrester analysts to gather data relative to Epicor ERP.

CUSTOMER INTERVIEWS
Interviewed four organizations using Epicor ERP to obtain data with respect to costs, benefits, and risks.

COMPOSITE ORGANIZATION
Designed a composite organization based on characteristics of the interviewed organizations.

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

CASE STUDY
Employed four fundamental elements of TEI in modeling the Epicor ERP solution'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.

The Epicor ERP Customer Journey

BEFORE AND AFTER THE EPICOR ERP INVESTMENT

Interviewed Organizations

For this study, Forrester conducted interviews with four manufacturers who are Epicor ERP customers. Interviewed customers include the following:

INDUSTRY	REGION	INTERVIEWEE	COMPANY SIZE
Consumer goods manufacturing	Asia Pacific/global	Executive director	2,000 employees
Industrial parts manufacturing	North America	Operations manager	50 employees
Industrial goods manufacturing	North America/global	Epicor ERP manager	850 employees
Automotive manufacturing	North America	IT manager	1,200 employees

Key Challenges

Customers considering Epicor ERP had many diverse reasons to explore the product. The major challenges cited by the interviewees included:

- **Requirements for growth and expansion could not be met by legacy systems.** Companies used a myriad of separate technologies for tasks such as order processing, material buying, scheduling, production, compliance, and financial management — and these often were not integrated. Interviewees recognized that they needed a "full on" ERP solution to quickly expand their business. One organization also recognized, as it planned for growth, that it needed to push information out to its customers and required access to this enterprise information globally. These were not capabilities that its current system had.
- **There was a lack of visibility across the enterprise, particularly around inventory accuracy.** Existing legacy systems did not give complete enterprise visibility. Several of the firms interviewed also had multiple sites on different systems. To compensate for this lack of information for supply chain management and production, these manufacturers typically held higher levels of inventory. Lack of visibility also resulted in reduced profit margins resulting from production errors, overtime, rush-ordered materials, expedited shipping costs, or missed sales opportunities.
- **Significant manual effort was required to accommodate diverse, siloed software suites.** The siloed legacy systems used by these manufacturing firms also required extensive manual processes. A lack of holistic analytics made planning every aspect of the business difficult and held the companies back from achieving production efficiencies. Extensive labor costs were generated via manual processes as data was exported, added, and manipulated in each system.

> "Visibility of real-time data was a huge issue for us, and to get there, we had to [implement] Epicor ERP. We needed to streamline our shop floors. We needed a more unified system. Each facility makes products for each other, and we transfer finished goods and materials between facilities all the time. We were all on separate databases and ERP systems, so by going to Epicor ERP, we were able to consolidate that into a single database, environment, cost center, and set of books."
>
> *IT manager, automotive manufacturing*

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Key Results

The interviews revealed that key results from the Epicor ERP investment include:

- **Productivity gains and cost savings from improved manufacturing processes and increased visibility.** With Epicor ERP, organizations saved time and improved productivity for their employees in supply chain management, planning and scheduling, customer service, production, the front office, sales, analytics, financial management, and risk and compliance. Increased visibility and efficiency also led to significant inventory cost savings as well as cost savings in shipping and production.
- **Increased sales from improved customer collaboration and customer relationship management.** Increased visibility and more efficient processes enabled organizations to collaborate more with their customers and improve customer experience. Organizations found that they could be more proactive and transparent with their customers as they identified issues and synergies in production. This increased customer responsiveness and resulted in more sales.
- **IT cost savings from consolidation and replacement of legacy systems.** Organizations with multiple legacy systems also saved on maintenance fees, IT infrastructure costs, management costs, and backup and recovery costs as they consolidated on one ERP platform with Epicor ERP.
- **Faster access to data and improved real-time visibility that enables better decision making.** Organizations gained faster access to data and information across the enterprise with their Epicor ERP implementation. This increased visibility and, in turn, enabled better enterprise agility as companies found they could make decisions quicker. One manager noted: "The game changer was the dashboards, real-time data, reporting, and customizability. Epicor ERP provided huge capabilities for streamlining process areas and reducing overhead. Having that real-time visibility and the ability to manipulate data on Epicor ERP to give you a different kind of view was the biggest benefit of the deployment." Another company also observed: "With more accurate information on hand [through Epicor ERP], we've been able to improve how our employees can make faster decisions. With a shorter lead time, they still have a more agile response."

  In addition, the quality of the data ensured that these manufacturers could make more strategic decisions. One executive director said: "With the improved transparency, we are able to make better investment decisions. For example, we have our own injection molding department. With a clear cost structure, we can look at a proposal for a robotic arm and with very concrete data, justify why this investment makes sense from an efficiency standpoint."
- **Increased competitiveness with quicker turnaround of customer quotes and improved pricing accuracy enabled by cost transparency.** Organizations were able to compete better in the market as efficiencies and visibility enabled by Epicor ERP enabled them to be more agile. Organizations could better track their costs, manage margins, and communicate with their customers to manage expectations and improve customer service.

> "Epicor ERP allows us to address issues while they are happening. We can go back with this information to our customers and be more proactive. There's more teamwork. We can share efficiencies. We increase our responsiveness and push transparency. It's viewing your business, suppliers, customers, and employees as partners. We've gotten customer referrals because of this."
>
> *Operations manager, industrial goods manufacturing*

> "Epicor ERP drives efficiency. It guides you to the problem children [in your processes] so you can grow your company."
>
> *Operations manager, industrial goods manufacturing*

> "Information transparency has been the biggest benefit of deploying Epicor ERP. My team now sees things on the same platform. In the manufacturing business, the key thing is to control costs and know the absolute real costs. With Epicor ERP and our RFID system, we've been able to look at the full picture at a more quantified level."
>
> *Executive director, consumer goods manufacturing*

Organizations also reported that their sales teams were able to turn around customer quotes quicker due to better access to information. Epicor ERP also enabled sales teams to track and monitor customer quotes to improve their responsiveness. One manufacturer saw its quote hit rate increase from 5% to 35% after its Epicor ERP deployment.

- **Faster time-to-market with increased collaboration.** Organizations standardized on a single database and system with Epicor ERP, and this standardization improved communication and collaboration among different teams. As one manager noted: "Going from [legacy system] to Epicor ERP, the culture shift was huge, but it made it a lot better and a lot faster to get our product out the door. One person in another facility could cover for a person in a different facility if needed, because we were all sharing information. Flexibility on the shop floor has improved." Another manufacturer could monitor raw material inventory between two sites and improve site management to deliver products quicker. Manufacturers reported faster fabrication and production processes because of increased collaboration and data sharing.
- **Increased agility for growth with multicompany operational efficiency with multibook capabilities.** Organizations also cited the global multisite management and multibook capabilities of Epicor ERP as a benefit to help them meet their goals for growth and expansion, as they acquired subsidiaries or established new facilities. One firm noted: "Before Epicor ERP, we did not have visibility into inventory of our distribution centers; we didn't have visibility into the sales of some of our facilities."
- **Increased versatility with deployment options such as the Epicor ERP cloud offering.** Organizations also benefited from the versatility of deployment options offered by Epicor. One organization noted that it increased its versatility, as its SaaS deployment of Epicor ERP could grow with it incrementally. It also noted that it was not able to keep up with upgrades in its legacy on-premises ERP system. With its switch to Epicor ERP in the cloud, the manufacturer would get automatic upgrades and benefit from new capabilities without additional development effort. Organizations also benefited from the flexibility of Epicor ERP for customization and the ability to leverage additional technology with its service-oriented architecture. This manufacturer noted: "We looked at many solutions and chose Epicor ERP. Other solutions, you build things from the ground up. With Epicor, you have a house that's already built, but still with a lot of leeway for customization to your own best practices."
- **Access to deep expertise in manufacturing best practices.** The deep expertise of the Epicor ERP team in manufacturing was also cited by the interviewees as a significant factor in their choice of ERP system. One operations manager noted: "Epicor understands job costing and how the guts behind the scenes work. They got the lingo of the manufacturing world, which makes a difference. With other companies, you talk to them about manufacturing concepts and it's like talking to a blank wall."

> "We've seen collaboration improve with Epicor ERP. Site management is much better. We can also measure better. We started to give middle management KPIs, and for them to hit the KPIs, they have no choice but to collaborate in the system."
>
> *Executive director, consumer goods manufacturing*

> "Epicor ERP's cloud-based offering makes sense as we have an aggressive plan for growth. We need systems that grow with us incrementally."
>
> *Operations manager, industrial parts manufacturing*

> "With Epicor ERP, we have access to data so we can make better-informed decisions. We know the standard costs of our parts. We can know how many seconds it takes to do this operation and how many people are on the line. All of that rolls into the actual cost of the product we built. That helps us know what our margin is. And if margins are too high, Epicor ERP gives you ways to look to improve processes, to make the job faster or save on material costs."
>
> *ERP manager, industrial goods manufacturing*

Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. The composite organization is representative of the four companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews has the following characteristics:

Description of composite. It is an industrial goods manufacturer with $350 million in annual revenue that is headquartered in the United States and caters to customers all over the world. The organization has 1,000 employees, with approximately 500 of those employees on the production floor. After various mergers and acquisitions, this industrial goods manufacturer has six manufacturing facilities and one distribution center. Prior to its Epicor ERP implementation, the various facilities had different solutions — some with legacy ERP systems, others with different siloed software suites for the shop floor and for its financial systems. As it grew and expanded production, the composite organization wanted to consolidate all these systems into a single ERP platform. It knew that it needed to manage costs, increase efficiency, and improve customer experience to grow in an increasingly competitive market. After evaluating several vendors, the composite organization chose Epicor ERP.

Deployment characteristics. The organization implemented Epicor ERP version 10 using a hosted deployment model. It currently has Epicor ERP version 10. Modules that it has implemented include customer relationship management; sales management; financial management; production management; enterprise performance management; governance, risk, and compliance; planning and scheduling; project management; supply chain management; product data management; and global business management. The organization also took advantage of the Epicor service-oriented architecture to leverage additional technology such as bolting on a separate system for RFID in production to Epicor ERP.

Key assumptions

1,000 employees

Approximately $350 million in annual revenue

Six manufacturing facilities

One distribution center

Consolidated different legacy ERP systems under Epicor ERP version 10

Financial Analysis

QUANTIFIED BENEFIT AND COST DATA AS APPLIED TO THE COMPOSITE

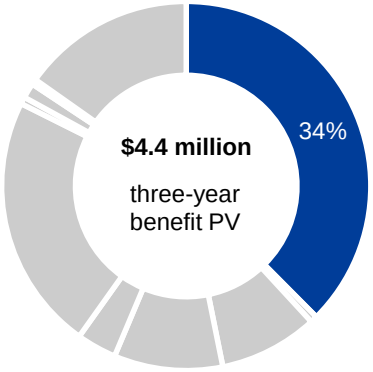
Total Benefits

REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Inventory savings	$0	$2,800,000	$2,800,000	$5,600,000	$4,417,731
Btr	Improved supply chain management efficiency	$16,168	$32,337	$32,337	$80,841	$65,718
Ctr	Improved planning and scheduling	$250,875	$501,750	$501,750	$1,254,375	$1,019,710
Dtr	Improved production efficiency	$406,800	$813,600	$813,600	$2,034,000	$1,653,485
Etr	Front-office labor savings	$101,250	$202,500	$202,500	$506,250	$411,542
Ftr	Incremental profit from increased revenue	$0	$1,680,000	$1,713,600	$3,393,600	$2,675,883
Gtr	Improved analytics efficiency	$17,813	$35,625	$35,625	$89,063	$72,401
Htr	Improved financial management processes	$38,475	$76,950	$76,950	$192,375	$156,386
Itr	Improved governance, risk, and compliance	$13,500	$27,000	$27,000	$67,500	$54,872
Jtr	IT cost savings with consolidation and replacement of legacy solutions	$936,000	$936,000	$936,000	$2,808,000	$2,327,693
	Total benefits (risk-adjusted)	**$1,780,881**	**$7,105,762**	**$7,139,362**	**$16,026,004**	**$12,855,421**

Inventory Savings Due To Increased Visibility

Interviewed customers gained increased visibility across the enterprise, leading to improved supply chain management, production management, and planning and scheduling processes with Epicor ERP. Some interviewees were able to transition to a just-in-time (JIT) manufacturing process using Epicor ERP. By improving forecasting, interviewees produced a much more accurate supply of products to match the actual demand. Materials management also improved. Organizations were able to curb overproduction and excess inventory storage, while also reducing the likelihood of manufacturing shortfalls. One manufacturing firm increased its inventory accuracy by 10%, while another increased its material efficiency from 80% to over 90%. Another firm noted that it was also able to increase the number of inventory turns through Epicor ERP. One customer estimated that the accurate forecasting enabled by Epicor ERP saved the company over $10 million in inventory costs annually. One interviewee discussed how “operators out on the [production] line actually scan parts… so that inventory is more accurate.” For one Epicor ERP customer, the move to real time inventory management also increased savings by allowing bulk buys of materials, even when serving multiple facilities. When one facility had a shortage, increased visibility allowed for easy coordination with other facilities.

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 composite organization expects risk-adjusted total benefits to be a PV of $12.9 million.



Inventory savings:
34% of total benefits

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For the composite organization, Forrester assumes that:

- Inventory costs were reduced by $3.5 million per year due to improved visibility into demand combined with more accurate forecasting and better planning and scheduling processes through Epicor ERP.
- To be conservative, the analysis assumes that these reductions in inventory costs were realized in Year 2 of the organization's Epicor ERP implementation, as the composite organization fully ramped adoption of more efficient processes and implemented results from initial analysis.

The organization also considered several impact risks that could potentially reduce anticipated inventory savings:

- Shifting market conditions leading to inaccurate forecasting.
- Production forecasts that could be inaccurate if the organization does not implement or fully utilize Epicor ERP in all departments. For example, if prospective sales data is not complete or if data does not flow immediately into the software, the system may not be able to project the amount of work that will need to be completed.
- Variability in inventory cost savings depending on an organization's industry and pre-Epicor ERP environment.

To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year risk-adjusted total PV of $4,417,731.

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.

Inventory Savings: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
A1	Inventory reduction		$0	$3,500,000	$3,500,000
At	Inventory savings	A1	$0	$3,500,000	$3,500,000
	Risk adjustment	↓20%			
Atr	**Inventory savings (risk-adjusted)**		**$0**	**$2,800,000**	**$2,800,000**

Improved Supply Chain Management Efficiency

Complex inventory management functionality available through Epicor ERP improved supply chain management processes and increased efficiency. Prior to Epicor ERP, these interviewed organizations faced heavily manual processes to buy and track orders. One organization slashed its annual inventory count efforts from 24 hours to only 8 hours for each of the 70 employees across its seven locations. Another interviewed organization was able to improve productivity for its 10 buyers by eliminating manual tracking of orders and inventory within spreadsheets and by automatically suggesting purchase orders based on the demand forecast.

For the composite organization, Forrester assumes that:

- Efficiencies through Epicor ERP reduced the labor effort for annual inventory counts from three days to one day, equivalent to 16 hours saved per person.
- The organization has 70 employees performing inventory counts across its seven locations. The fully loaded compensation for these employees is $40,000 per year.

- More efficient supply chain management processes, such as order and inventory tracking, through Epicor ERP improved buyer productivity by 5%.
- Forrester assumes that only 50% of these time savings are captured for productive work.
- The composite organization has 10 buyers, and they are compensated with a fully loaded annual salary of $50,000.
- To be conservative, Forrester assumes that in the first year of implementation, the organization only sees 50% of these productivity gains, equivalent to five buyers. By Year 2, all buyers will see these 5% improved productivity gains.

The improvement in supply chain management efficiency will vary with:

- The extent to which Epicor ERP is implemented across locations and departments.
- The number of buyers, inventory managers, and locations and variability in compensation.
- The organization's ability to capture additional productivity from freed buyer time.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of $70,916.

Improved Supply Chain Management Efficiency: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
B1	Number of people		5	10	10
B2	Annual compensation		$50,000	$50,000	$50,000
B3	Productivity improvement		5%	5%	5%
B4	Percentage captured		50%	50%	50%
B5	Buyer productivity improvement	B1*B2*B3*B4	$6,250	$12,500	$12,500
B6	Inventory count savings	10 people*7 locations*16 hours*($40K/ 2,080 hours)	$10,769	$21,538	$21,538
Bt	Improved supply chain management efficiency	B5+B6	$17,019	$34,038	$34,038
	Risk adjustment	↓5%			
Btr	**Improved supply chain management efficiency (risk-adjusted)**		**$16,168**	**$32,337**	**$32,337**

Improved Planning And Scheduling

Using Epicor ERP, interviewed customers experienced improved productivity of production schedulers. By delivering more accurate data to customers with a faster turnaround time, they reduced efforts on behalf of their customer service staff. With better planning and scheduling, these manufacturers also reduced the number of delayed jobs and ultimately avoided substantial expedited shipping costs as a result. One firm noted: “Too many jobs in the system means we had to expedite shipping, and that costs us between $10K to $30K. Before Epicor, we had two issues a week that required expedited shipping. That’s been reduced to one issue every two weeks.”

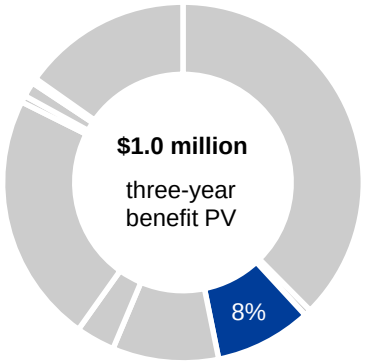
For the composite organization, Forrester assumes that:

- Using Epicor ERP, it reduces issues that require expedited shipping by 26 per year. In the first year of implementation, Forrester conservatively assumes that only 50% of these improved planning and scheduling benefits are realized. The average cost of expedited shipping per incident is $20,000.
- Production scheduling and customer service staff both experience a 10% increase in efficiency, of which 50% is captured for productive work.
- It employs five dedicated customer service staff and 10 production scheduling staff, at an average fully loaded annual salary of $50,000.

The reduction in planning and scheduling expense will vary with:

- The type and value of the products, markets the organization serves, and the distribution methods it uses to serve those markets.
- The accuracy of the pre-Epicor ERP state system and quantity of related issues.
- The number of customer service and production scheduling staff and their fully loaded compensation.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of $1,019,710.



Improved planning and scheduling: **8%** of total benefits

Improved Planning And Scheduling: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
C1	Average cost to expedite shipping		$20,000	$20,000	$20,000
C2	Number of incidents avoided annually		13	26	26
C3	Shipping cost avoidance	C1*C2	$260,000	$520,000	$520,000
C4	Productivity improvement for planners, schedulers, and customer inquiry handling	15 FTEs * 10% * $50K * 50%	$18,750	$37,500	$37,500
Ct	Improved planning and scheduling	C3+C4	$278,750	$557,500	$557,500
	Risk adjustment	↓10%			
Ctr	**Improved planning and scheduling (risk-adjusted)**		**$250,875**	**$501,750**	**$501,750**

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Improved Production Efficiency

All interviewed organizations realized key production improvements by moving to Epicor ERP. Companies were able to level production loads; for one interviewed company, it reduced overtime by 5% to 10% for eight months and by 20% in its busiest four months. One interviewee discussed being able to shift their production line staff from 70% to 80% billable time up to 90% billable time by more efficiently using staff and monitoring labor more effectively. Similarly, one interviewee found they could save 5 minutes per production unit on a line, and another customer was able to improve line efficiency by 1 hour per day. Companies additionally identified significant accuracy improvements, with one interviewee achieving a 10% to 15% improvement in accuracy and $250,000 annually in rework savings. One interviewee also eliminated one position for data entry with an annual salary of $30,000.

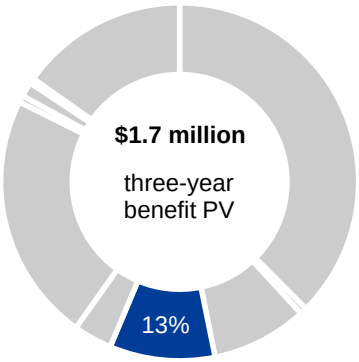
For the composite organization, Forrester assumes that:

- With Epicor ERP, overtime hours for approximately 200 production line employees were reduced by 8 hours a week per person through level loading of schedules of work centers and staff on the production floor. This overtime typically occurred during the composite organization's four-month (approximately 17-week) peak season.
- The rate for these production line employees is $15 per hour, with overtime at 1.5x that.
- Job rework costs were reduced by $250,000 per year.
- To be conservative, the Forrester analysis assumes that only 50% of all cost and production efficiency savings are realized in the first year of the Epicor ERP implementation.

The improvement in production efficiency will vary with:

- The number and fully loaded compensation of production line employees affected by overtime, as well as the current level of overtime and seasonal production demands.
- The current production accuracy and levels of rework.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of $1,653,485.



Improved production efficiency: **13%** of total benefits

Improved Production Efficiency: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
D1	Cost savings from reduction in job rework		$125,000	$250,000	$250,000
D2	Labor savings from data entry process automation		$15,000	$30,000	$30,000
D3	Reduction in overtime hours through level loading of schedules of work centers and staff on production floor	200 FTEs * 8 hrs. * 17 weeks * $22.5/hr. * 50% realized	$312,000	$624,000	$624,000
Dt	Improved production efficiency	D1+D2+D3	$452,000	$904,000	$904,000
	Risk adjustment	↓10%			
Dtr	**Improved production efficiency (risk-adjusted)**		**$406,800**	**$813,600**	**$813,600**

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Front-Office Savings

Multiple interviewed companies discussed being able to take on business growth with increased agility due to Epicor ERP. One interviewee's company moved three FTEs from their front office to more valuable production work, while another interviewee noted that they increased headcount by only 20% even while their business was growing by a much larger 50%. While the details of this benefit will vary greatly for each organization, interviewed organizations were clearly able to take advantage of the agility provided by Epicor ERP to optimize their labor resources.

For the composite organization, Forrester assumes that:

- In the first year, the organization shifted 1.5 FTE front-office staff to production, followed by an additional 1.5 FTEs in the second year.
- The fully loaded annual compensation of front-office staff is $75,000.

The value of front-office savings with increased agility will vary with actual business growth and the associated operational demands based on specific industries and regions.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of $411,542.

Increased Agility — Growth: Calculation Table

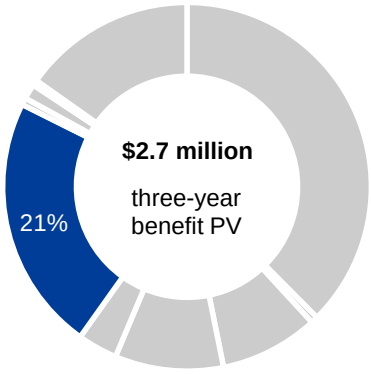
REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
E1	Number of front-office staff moved to design and production with optimized processes		1.5	3.0	3.0
E2	Annual compensation		$75,000	$75,000	$75,000
Et	Increased agility — growth	E1*E2	$112,500	$225,000	$225,000
	Risk adjustment	↓10%			
Etr	**Increased agility — growth (risk-adjusted)**		**$101,250**	**$202,500**	**$202,500**

Improved Customer Experience Leading To Increased Revenue

Interviewed organizations found that the improved forecasting, visibility, efficiency, and customer experience led to increased revenues. One customer identified a six-fold increase in its quote hit rate from 5% to 35%. It closed contracts with three times as many customers per year and gained $50,000 per year in referrals. The customer also found that increased collaboration and visibility enabled it to sell parts to more customers. Another interviewee shared that with Epicor, they increased revenue annually by 5% to 10% rather than 1% to 2% when using legacy systems.

For the composite organization, Forrester assumes that:

- It has an annual revenue of $350 million, with an average 2% growth rate and a profit margin of 10%.
- It experienced a 6% annual increase in revenue in years 2 and 3 that it would not have experienced without Epicor ERP.



Incremental profit from increased revenue: **21%** of total benefits

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- The benefit of increased sales from improved customer experience due to increased customer collaboration, visibility, and process efficiency will not be realized until Year 2 of the Epicor ERP implementation.

The amount of incremental profit increases will vary with:

- The annual revenue and average profit margin of the organization.
- The extent to which Epicor ERP is deployed across sales, billing, and production teams and the time it takes to fully adopt the system and implement changes from better analysis.
- The organization's efforts to leverage Epicor ERP to provide better customer service and collaborative projects.

To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year risk-adjusted total PV of $2,675,883.

Incremental Profit From Increased Revenue: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
F1	Annual revenue		$350,000,000	$357,000,000	$364,140,000
F2	Percentage increase in revenue due to better customer experience with improved processes and increased collaboration with Epicor ERP		0%	6%	6%
F3	Profit margin	Sample manufacturing industry operating margin	10%	10%	10%
Ft	Incremental profit from increased revenue	F1(from previous year)*F2*F3	$0	$2,100,000	$2,142,000
	Risk adjustment	↓20%			
Ftr	**Incremental profit from increased revenue (risk-adjusted)**		**$0**	**$1,680,000**	**$1,713,600**

Improved Analytics Efficiency

Organizations also gained better analytics and BI capabilities through Epicor ERP. They consistently cited the ease of creating and using dashboards within Epicor ERP to access valuable information and analysis to improve efficiency in the enterprise. These manufacturers found that they could implement sophisticated analysis with real-time information from all areas within the organization and close monitoring of key performance indicators. Prior to Epicor ERP, organizations' analytics teams had to work with the IT department to mine data from back-end systems to generate reports. Epicor ERP brought more efficient reporting capabilities and saved time and effort for the analytics teams.

For the composite organization, Forrester assumes that:

- Improved efficiency for the entire six-person analytics team is quantified at half an FTE. The fully loaded compensation for this analytics team is $75,000.
- To be conservative, the analysis assumes that only 50% of these analytics efficiency savings are realized in the first year of the Epicor ERP implementation.

> "The dashboard function in Epicor ERP version 10 works very well because you can create a dashboard for users on the fly and give them insight into what's happening in a format that they want. It saved a lot of time for us trying to run queries and give the data to them."
>
> *IT manager, industrial goods manufacturing*

Other organizations may find variable results depending upon their usage of analytics, the size of the analytics team, and the compensation of these analysts.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of $72,401.

Improved Analytics Efficiency: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
G1	Number of FTEs saved for analytics team		0.25	0.50	0.50
G2	Annual compensation per person		$75,000	$75,000	$75,000
Gt	Improved analytics efficiency	G1*G2	$18,750	$37,500	$37,500
	Risk adjustment	↓5%			
Gtr	**Improved analytics efficiency (risk-adjusted)**		**$17,813**	**$35,625**	**$35,625**

Improved Financial Management Processes

Organizations also gained more efficient financial management processes with their Epicor ERP implementation. One interviewee consolidated and restructured their team in the face of significant business growth, allowing them to avoid a projected 25% increase in project staff of 14 FTEs across seven facilities. Two other interviewed organizations discussed reduced efforts for end-of-month reporting, saving 12 hours per FTE in the last week of every month.

The composite organization saved 144 hours per year for its financial managers and accountants, affecting 7.5 FTEs in Year 1 and 15 FTEs in years 2 and 3 at an annual salary of $78,000.

Risks that may affect the actual value of these benefits could derive from the number of financial managers and accountants, their salaries, and industry-specific financial procedures.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year risk-adjusted total PV of $156,386.

Improved Financial Management Processes: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
H1	Number of financial management/accounting staff		7.5	15	15
H2	Number of hours saved each year	3*4 hrs.*12 mos.	144	144	144
H3	Hourly compensation	$78,000 per year	$37.50	$37.50	$37.50
Ht	Improved financial management processes	H1*H2*H3	$40,500	$81,000	$81,000
	Risk adjustment	↓5%			
Htr	**Improved financial management processes (risk-adjusted)**		**$38,475**	**$76,950**	**$76,950**

Improved Governance, Risk, And Compliance

Compliance can be especially difficult for multinational organizations. Each region may have different demands for production, sales, and

shipping and will require companies to provide a variety of complex reporting to prove they are following all applicable rules. Many customers turn to an Epicor ERP solution to help them automatically adhere to all the regional regulations correctly, reducing the risk of mistakes and forgotten actions. Epicor ERP also assists by automatically pulling together any necessary reports and logs on schedule and in the correct format, improving employee productivity and reducing risks of fines or other costly regulatory issues. One interviewee streamlined compliance activities by automatically creating documents and coordinating with different agencies, ultimately reducing headcount by one FTE.

- The composite organization reduced compliance personnel by one FTE per year at a fully loaded compensation of $30,000. To be conservative, the analysis assumes that only 50% of these analytics efficiency savings are realized in the first year of the Epicor ERP implementation.

The actual level of compliance savings will vary depending on the following:

- The specific regions in which production and distribution occur. Companies operating in the US, in multiple European countries, or on a truly global scale will have vastly different compliance needs.
- The industry and its associated regulatory demands, which vary widely between sectors such as pharmaceuticals and consumer goods. Savings could be achieved both through staffing efficiencies and reduced risk of regulatory fines for failed compliance.
- The quantity and fully loaded compensation of compliance personnel.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of $54,872.

Improved Governance, Risk, And Compliance: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
I1	Number of compliance personnel saved		0.5	1.0	1.0
I2	Annual compensation per person		$30,000	$30,000	$30,000
It	Improved governance, risk, and compliance	I1*I2	$15,000	$30,000	$30,000
	Risk adjustment	↓10%			
Itr	**Improved governance, risk, and compliance (risk-adjusted)**		**$13,500**	**$27,000**	**$27,000**

IT Cost Savings With Consolidation And Replacement Of Legacy Solutions

For the companies interviewed, a major goal of implementing an ERP system is to consolidate software to reduce their associated licensing, hosting, and administration costs. This especially affects large, global companies that need to manage multiple production facilities and diverse ordering systems worldwide. A number of the manufacturers interviewed had multiple ERP systems for their facilities and subsidiaries as a result of growth through mergers and acquisitions. One interviewed company eliminated legacy software that charged per seat, accumulating $800,000 in licensing alone, compared with Epicor ERP's $124,000 licensing cost. Another interviewed company leveraged Epicor ERP to

bring all its sites onto the same platform, which eliminated $400,000 in infrastructure costs, associated legacy maintenance fees, as well as six FTEs charged with backup and recovery and 14 system administrators across these seven sites.

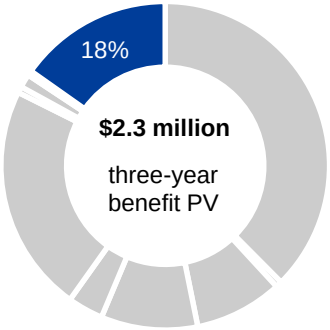
For the composite organization, Forrester assumes that:

- It eliminated $800,000 in annual maintenance fees and infrastructure costs to support its legacy ERP systems.
- It reduced IT staffing by two FTEs, saving $190,000 annually.
- It saved $50,000 in backup and recovery costs by moving to Epicor ERP.

The overall benefit may deviate from the risks based on the variability of the following:

- Quantity, cost, and types of legacy systems and infrastructure.
- Quantity of production and distribution facilities.
- Number of active users.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of $2,327,693.



IT cost savings with consolidation and replacement of legacy solutions: **18%** of total benefits

IT Cost Savings With Consolidation And Replacement Of Legacy Solutions: Calculation Table

REF.	METRIC	CALC.	YEAR 1	YEAR 2	YEAR 3
J1	Cost of legacy solutions — maintenance fees and infrastructure costs		$800,000	$800,000	$800,000
J2	IT resource costs		$190,000	$190,000	$190,000
J3	Backup and recovery savings		$50,000	$50,000	$50,000
Jt	IT cost savings with consolidation and replacement of legacy solutions	J1+J2+J3	$1,040,000	$1,040,000	$1,040,000
	Risk adjustment	↓10%			
Jtr	**IT cost savings with consolidation and replacement of legacy solutions (risk-adjusted)**		**$936,000**	**$936,000**	**$936,000**

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 Epicor ERP and later realize additional uses and business opportunities, including:

- As the organizations gained improved agility and efficiency with their implementation of Epicor ERP 10, they would see additional cost savings and incremental revenue and profits from faster time-to-market as they launched new products or expanded into new geographies.

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.

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- Organizations that implemented less than the full number of available modules of the Epicor ERP suite would see additional efficiency benefits and cost savings as they implemented other modules and capabilities. These capabilities could also include social, mobile, and BI capabilities that Epicor ERP offers.
- Organizations that implemented Epicor ERP in a SaaS deployment model are also future proofed, as their systems are automatically upgraded with capabilities and features. As a result, they can quickly realize the associated benefits from these upgrades. The scale of these benefits will be dependent on the appetite of the organizations to implement these new features.
- One organization also cited that it chose Epicor ERP because it had the flexibility to move to the cloud when needed with minimal transition costs. It had already implemented a hosted deployment for Epicor ERP.
- Organizations can also choose to leverage additional manufacturing technology, such as 3D printing, with Epicor's service-oriented architecture. They can save on integration costs and see revenue benefits or efficiency savings from these initiatives.

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

"We have a few manufacturing partners overseas, and I like the way that Epicor ERP sets us up with the capabilities for our next acquisition. We like the fact that we can use the same module in a different fashion. And with the cloud-based Epicor ERP technology, we are ready for growth."

Operations manager, industrial parts manufacturing

Total Costs

REF.	COST	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Ktr	Epicor Fees	$1,050,000	$0	$210,000	$210,000	$1,470,000	$1,381,330
Ltr	Infrastructure costs	$0	$252,000	$252,000	$252,000	$756,000	$626,687
Mtr	Professional fees	$241,500	$21,000	$21,000	$21,000	$304,500	$293,724
Ntr	Implementation cost	$378,350	$0	$0	$0	$378,350	$378,350
Otr	Administrative costs	$0	$343,350	$343,350	$343,350	$1,030,050	$853,861
	Total costs (risk-adjusted)	**$1,669,850**	**$616,350**	**$826,350**	**$826,350**	**$3,938,900**	**$3,533,951**

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 composite organization expects risk-adjusted total costs to be a PV of $3.5 million.

Epicor Fees

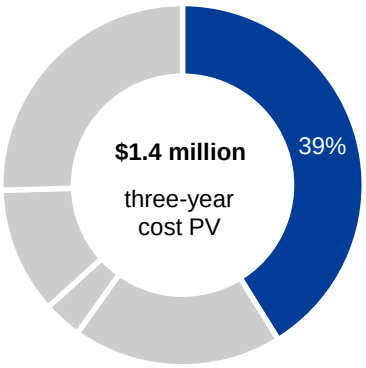
Organizations interviewed implemented Epicor ERP in a hosted model, on-premises, or in a SaaS deployment. Epicor provides different pricing models based on each organization's choice of deployment — cloud, hybrid, or on-premises.

- The composite organization chose to deploy Epicor ERP as a hosted solution.
- In this analysis, the composite organization spent $1 million for its Epicor ERP license. This initial $1 million included first-year maintenance fees. Subsequent annual maintenance fees of 20% of license fees, equivalent to $200,000 starting from Year 2, were paid by the composite organization.
- As fees are variable, readers of this study should consult with Epicor for pricing specific to their organization when conducting their own analysis.

Risks that affect this cost include:

- Epicor license and maintenance fees vary from organization to organization, considering different contract agreements, the number of modules implemented, and the number of users

To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of $1,381,330.



Epicor fees:
39% of total costs

Epicor Fees: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
K1	License		1,000,000			
K2	Maintenance				200,000	200,000
Kt	Epicor fees	K1+K2	$1,000,000	$0	$200,000	$200,000
	Risk adjustment	↑5%				
Ktr	**Epicor fees (risk-adjusted)**		**$1,050,000**	**$0**	**$210,000**	**$210,000**

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Infrastructure Costs

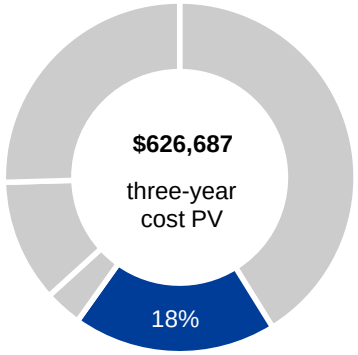
Epicor ERP can be set up on internal servers, hosted externally, or delivered in a SaaS model. Some companies choose to host the software internally for security and control, while other companies choose to use external hosting, as it reduces capital expenditures and ongoing maintenance while also increasing the flexibility to add or reduce server space.

The composite organization in this model relied entirely on external hosting for Epicor ERP, spending $240,000 annually.

The following factors may affect the actual infrastructure costs experienced by other customers:

- Existing infrastructure and legacy systems that may need to be integrated.
- Cost differences between internal and external hosting.
- Quantity of facilities, users, and products and the resulting amount of data and processing demands needed.

To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of $626,687.



Infrastructure costs: **18%** of total costs

Infrastructure Costs: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
L1	Hosting fees			20,000	20,000	20,000
L2	Number of months			12	12	12
Lt	Infrastructure costs	L1*L2	$0	$240,000	$240,000	$240,000
	Risk adjustment	↑5%				
Ltr	**Infrastructure costs (risk-adjusted)**		**$0**	**$252,000**	**$252,000**	**$252,000**

Professional Fees

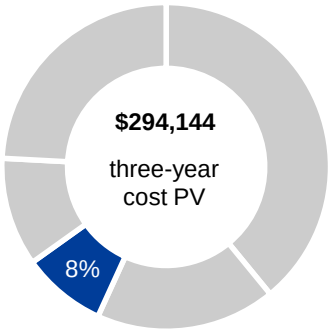
Professional services were vital for ensuring Epicor ERP was implemented effectively. With such a complicated system, it is essential that organizations avoid mistakes — such as incorrect orders, poor customer service, overproduction, or rework — because the associated costs could be very significant. All interviewed organizations turned to approved third-party companies to implement and maintain the system in the long term.

Professional services fees were modeled using:

- $230,000 of professional services to implement the system.
- $20,000 of annual ongoing support from professional services.

The following factors may affect the actual professional fees experienced by other customers:

- Integration with legacy systems or process design may prove more complex and costly than initially anticipated.



Professional fees: **8%** of total costs

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- Inaccurate, incomplete, or shifting requirements could lead to extra labor to redesign aspects of the system.
- Varying third-party vendors may charge their fees in different ways and at different price levels.

To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of $294,144.

Professional Fees: Calculation Table

REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
M1	Third-party deployment services		$230,000			
M2	Ongoing professional services			20,000	20,000	20,000
Mt	Professional fees	M1+M2	$230,000	$20,000	$20,000	$20,000
	Risk adjustment	↑5%				
Mtr	**Professional fees (risk-adjusted)**		**$241,500**	**$21,000**	**$21,000**	**$21,000**

Implementation Costs

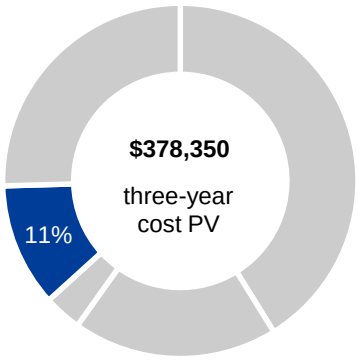
All interviewees were able to successfully implement the Epicor ERP system in a six-month timeframe. Implementation costs were modeled using the following:

- The composite organization dedicated 60% of 10 leads from different functional departments who were compensated at fully loaded annual salaries of $78,000.
- Two IT resources were fully dedicated to deployment, with fully loaded annual salaries of $95,000.
- Implementation took six months to reach full deployment.

The following factors may affect the actual implementation cost and timeline experienced by other organizations:

- Number of facilities, regions, product lines, and departments that need to be brought onboard and the variety of implementations across their legacy systems.
- Number of IT resources and functional leads and their fully loaded compensation.
- Integration with legacy systems or process design that may prove more complex and costly than initially anticipated.
- Inaccurate, incomplete, or shifting requirements, which could lead to extra labor to redesign aspects of the system.
- How much they rely on external professional services versus internal resources to deploy the system.

To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year risk-adjusted total PV of $378,350.



Implementation costs: **11%** of total costs

Six months
Total implementation and deployment time

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Implementation Costs: Calculation Table						
REF.	METRIC	CALC.	INITIAL	YEAR 1	YEAR 2	YEAR 3
N1	Number of functional leads		10			
N2	Annual compensation per functional lead		$78,000			
N3	Percentage of time spent on implementation		60%			
N4	Number of IT resources		2			
N5	Annual compensation per IT resource		$95,000			
N6	Percentage of time spent on implementation		100%			
N7	Length of implementation (years)		0.5			
Nt	Implementation costs	((N1*N2*N3)+ (N4*N5*N6))*N7	$329,000	$0	$0	$0
	Risk adjustment	↑15%				
Ntr	**Implementation costs (risk-adjusted)**		**$378,350**	**$0**	**$0**	**$0**

Administrative Costs

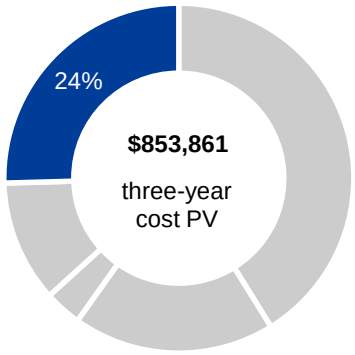
Epicor ERP customers found it essential to employ staff to perform the ongoing maintenance, deploy patches, run scripts, index, and more. The composite organization was modeled with the following parameters:

- Two full-time resources are dedicated to administration of the Epicor ERP platform, with fully loaded salaries of $78,000.
- Three additional developers devote 60% of their efforts to Epicor ERP development, patches, scripts, and other maintenance, with fully loaded salaries of $95,000.
- Readers should note that a SaaS deployment of Epicor ERP would reduce costs associated with software patches and versioning, since the vendor assumes this role.

The following risks may affect ongoing administrative costs:

- The level of complexity of an organization's deployment, including the number of modules implemented and the implementation model.
- The changing business needs or reorganization.
- The fully loaded compensation of IT labor.

To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year risk-adjusted total PV of $853,861.



Administrative costs: **24%** of total costs

Two FTEs spend 100% of their time on ongoing management of Epicor ERP.

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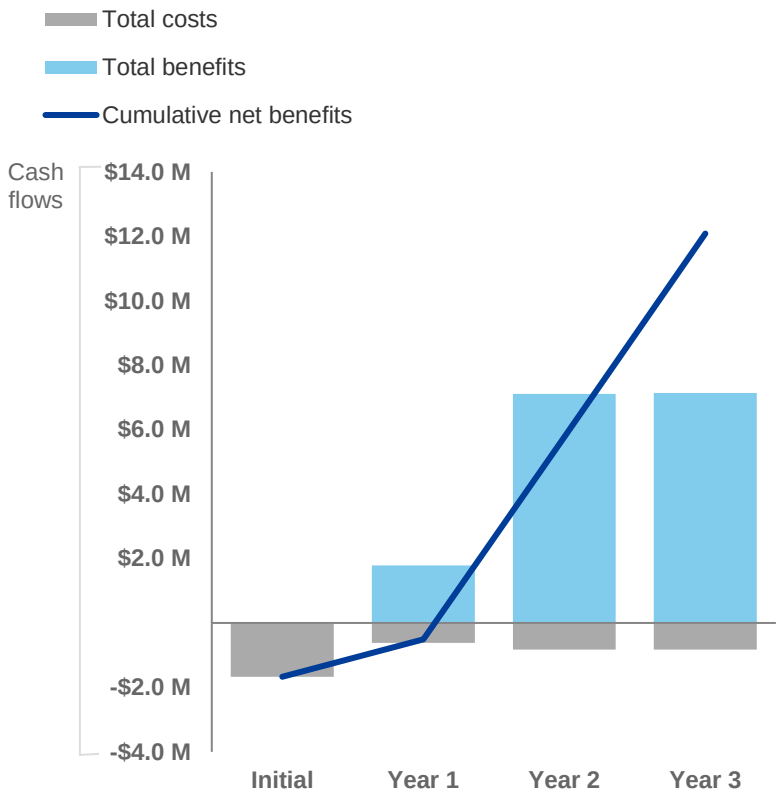
Administrative Costs: Calculation Table						
REF.	**METRIC**	**CALC.**	**INITIAL**	**YEAR 1**	**YEAR 2**	**YEAR 3**
O1	Number of people — full time			2	2	2
O2	Annual rate per person			$78,000	$78,000	$78,000
O3	Number of developers — part time			3	3	3
O4	Annual rate per developer			$95,000	$95,000	$95,000
O5	Percentage of time spent			60%	60%	60%
Ot	Administrative costs	(O1*O2)+ (O3*O4*O5)	$0	$327,000	$327,000	$327,000
	Risk adjustment	↑5%				
Otr	**Administrative costs (risk-adjusted)**		**$0**	**$343,350**	**$343,350**	**$343,350**

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)



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

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

Cash Flow Table (Risk-Adjusted)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	($1,670,270)	($616,350)	($826,350)	($826,350)	($3,939,320)	($3,534,371)
Total benefits	$0	$1,780,881	$7,105,762	$7,139,362	$16,026,004	$12,855,421
Net benefits	($1,670,270)	$1,164,531	$6,279,412	$6,313,012	$12,086,684	$9,321,050
ROI						264%
Payback period						13 months

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Epicor ERP: Overview

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

Epicor Software drives business growth. Epicor provides flexible, industry-specific software that is designed around the precise needs of manufacturers. More than 40 years of experience with customers' unique business processes and operational requirements is built into every solution. With deep industry knowledge, Epicor solutions spur growth while managing complexity. With margins for products eroding, customer demands increasing, and the world in a state of uncertainty, manufacturers must leverage technology to increase business agility, enable insightful decision making, and achieve even more at the fastest pace. Designed for the way people work today, yet ready for how people will work tomorrow, Epicor provides a proven foundation with which to leverage new technologies such as the internet of things, big data and analytics, social collaboration, and mobility, which all support manufacturers moving toward Industry 4.0 and smart manufacturing initiatives. Replacing technology, integration, and accessibility barriers that stifle productivity, Epicor ERP provides a new level of collaboration, visibility, and results. The result is powerful solutions that free your resources so you can grow your business.

Ideal to support make-to-order, configure-to-order, and configure-to-stock manufacturing and guided by the needs of today's users, Epicor ERP is a global enterprise resource planning solution that delivers the choice, flexibility, and agility to drive growth and opportunity throughout businesses without the complexity of legacy platforms. A single, end-to-end software solution for business, Epicor ERP is available in the cloud or on-premises. Epicor ERP offers a modular approach with robust capabilities focused on reducing costs, streamlining processes, and improving customer responsiveness across the enterprise — all top priorities toward achieving continued growth and profitability.

Epicor ERP is distinguished for offering a variety of deployment choices for any deployment needs (on-premises, multitenant, single-tenant, dedicated-tenant, and hybrid). The latest deployment option, dedicated-tenant cloud, offers a higher isolation environment with a combination of the benefits of single-tenant and multitenant deployments. Tenants share infrastructure, but they have their own database, increased customization options, and more control over when they adopt major releases. This delivers increased flexibility compared to traditional multitenant cloud offerings but with lower costs compared to single-tenant environments.

Epicor ERP is also unique for offering complete flexibility in deployment scenarios. Customers can move back and forth and mix and match between a variety of deployment models as needed because it is based on the same code line. Epicor ERP has been developed as a single code line using a service-oriented architecture to support differing sizes of business and deployment scenarios. This also means that Epicor ERP in the cloud offers the same depth and breadth as it does on-premises. Epicor ERP is just as robust delivered in the cloud as it is on-premises.

Epicor ERP Modules include:

- **Customer Relationship Management.** Manage customer and partner data, quotes, orders, invoices, multilevel pricing contracts, and more.
- **Performance Management**. Get greater visibility into your business and make better decisions with Epicor Performance Management.
- **Enterprise Content Management.** Capture, store, manage, and retrieve your documents and content anytime, on any device.
- **Financial Management.** Manage financial operations and gain powerful insights into performance, expense, and risk.
- **Planning and Scheduling.** Anticipate and respond flexibly to changes in customer demand to minimize downtime and disruption.
- **Production Management.** Simplify processes, reduce waste, and improve profitability no matter how simple or complex your products are.
- **Project Management.** Plan and execute simple projects or complex, multilevel projects and strict costing and billing.

- **Service Management.** Coordinate service center processes to secure resources and materials at the right time, for the lowest cost.
- **Human Capital Management.** Drive process improvements from onboarding to career development and talent management.
- **Supply Chain Management.** Manage all aspects of your supply chain more efficiently from forecasting to fulfillment.
- **Sales Management.** With a comprehensive suite, produce accurate estimates, streamline your order-to-cash cycle, and fulfill perfect orders that ensure world-class customer satisfaction.
- **Product Data Management.** With a complete end-to-end solution, manage all aspects of a product's life cycle and control the enormous number of electronic documents produced.
- **Governance/Risk/Compliance.** Stay compliant and ensure that employees and partners at all levels of the organization are aware of the associated risks of noncompliance.
- **Business Architecture.** Use enterprise applications that Epicor designed and built from the ground up using state-of-the-art connected systems architecture.
- **Global Business Management.** Support transactional functions between systems and entities including intercompany transactions such as intercompany orders, transfer orders, and shipments between plants and warehouses. Epicor facilitates these scenarios within a single application that is flexible enough to grow with you as you expand your business**.**

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.

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Appendix B: Supplemental Material

Related Forrester Research

“Vendor Landscape: SaaS ERP Applications, 2017,” Forrester Research, Inc., January 23, 2017